

1 TGCAGTTAA GTGTCGGAT TCCAAGGGAA ACAGACAAAC CTCACGAAAG
 51 GAAGGAAGCA AGCAAGCAAG GAAGGAAGT CAGGAGGAAA AGAACAGGCA
 101 GAACAGCGAG AAGAATAAAG GGAAAGGGGG GGAAACACCA AATCTATGAT
 151 TGGACCTGGG CTTCTTTTC GCCTATGCAA AAAGGAATAT GCAGCACATT
 201 TTTGCCTTCT TCTGCACCGG TTTCTTAGGC GCGGTAGTAG GTGCCAATT
 251 CCCCCAACAT ATCCAGATCG GGGGATTATT TCCAAACCAG CAGTCACAGG
 301 AACATGCTGC TTTTAGATT GCTTGTGCC AACTCACAGA GCCCCCGAAG
 351 CTGCTCCCCC AGATTGATAT TGTGAACATC AGCGACAGCT TTGAGATGAC
 401 CTATAGATTC TGTCCCAGT TCTCCAAAGG AGTCTATGCC ATCTTGGGT
 451 TTTATGAACG TAGGACTGTC AACATGCTGA CCTCCTTTG TGGGGCCCTC
 501 CACGTCTGCT TCATTAGCC GAGCTTTCCC GTTGTATACAT CCAATCAGTT
 551 TGTCTTCAG CTGCGCCCTG AACTCGAGGA TGCCCTCATC AGCATCATTG
 601 ACCATTACAA GTGGCAGAAA TTTGCTACA TTATGATGC CGACCGGGGC
 651 TTATCCGTCG TGCAAGAACT CCTGGATACA GCTGCTGAGA AGAACTGGCA
 701 GGTGACAGCA GTCAACATT TGACAACCCAG AGAGGAGGGG TACCGGATGC
 751 TCTTCAGGA CCTGGAGAAG AAAAAGGAGC GGCTGGTGGT GGTGGACTGT
 801 GAATCAGAAC GCCTCAATGC TATCTGGGC CAGATTATAA AGCTAGAGAA
 851 GAATGGCATC GGCTACCACT ACATTCTGC AAATCTGGGC TTCACTGGACA
 901 TTGACTTAAACAAATTCAAG GAGAGTGGCG CCAATGTCAG AGGTTTCCAG
 951 CTGGTGAACAT ACACAGACAC TATCCGGCC AAGATCATGC AGCAGTGGAA
 1001 GAATAGTGTG GCTCGAGAAC ACACACGGT GGACTGAAAG AGACCCAAGT
 1051 ACACCTCTGC GCTCACCTAC GATGGGTGA AGGTGATGGC TGAGGCTTTC
 1101 CAGAGCCTGC GGAGGCAGAG AATTGATATA TCTCGCCGGG GGAATGCTGG
 1151 GGATTGTCG GCTAACCCAG CTGTTCCCTG GGGCCAAGGG ATCGACATCC
 1201 AGAGAGCTCT GCAGCAGCTG CGATTGAAAG GTTAACAGG AACACGTGCAG
 1251 TTTAATGAGA AAGGACCCG GACCAACTAC ACCCTCCACG TGATTGAAAT
 1301 GAAACATGAC GGCATCCGAA AGATTGGTTA CTGGAATGAA GATGATAAGT
 1351 TTGTCCTGAG AGCCACCGAT GCCCAAGCTG GGGCGATAA TTCAAGTGT
 1401 CAGAACAGAA CATAACATCGT CACAAACATC CTAGAAGATC CTTATGTGAT
 1451 GCTCAAGAAC AACGCCAAC AGTTTGAGGG CAATGACCGT TACGAGGGCT
 1501 ACTGTGTAGA GCTGGCCGCA GAGATTGCCA AGCACGTGGG CTACTCCTAC
 1551 CGTCTGGAGA TTGTCAGTGA TGGAAGATAC GGAGCCCGAG ACCCTGACAC
 1601 GAAGGGCTGG AATGGCATGG TGGGAGAGCT GGTCTATGGA GTAAGTTCAC
 1651 TGCAGGGTGG GAAATTAGAG GGCGGAGGCA GAGGGTTGA CAGGAAATCA
 1701 TTTGGTGGTTT GGGTGGCCCT GCCCACAGAT GTCTATGAAA CCCTGTAATT
 1751 GAGTGTGTTG GCTGCTGAAC AGATGAGTCA TCCAAAATCC AATTCTTC
 1801 GACACTCTT GTTCAGGTTA CTGGTCCCTAG GTCCCTCAAT CCCACTCAGA
 1851 GTCTTGTGAC GTCAGTTGAT TGTGTCCAA CACAGGTGAC AGCATAGCTC
 1901 CAAGATCAAT TTTCTTGAGG CAGACTGCTG AGTGTCTAT ACAAAAGTCAC
 1951 TTGTGGCTCT CTCAGTATCA GTTCTTCTC TGATATTAAA TGCATCTGGA
 2001 GCCAACCTAA CTTTCTAGTT ACTGCCCCTCT CTAGTTTCAT GCTCTCTCAT
 2051 GAAATTTCCA ATTCACTGCAA ATGCCCTTA ATTACTCTGT TCCCTAGAGT
 2101 GCTCCCTTCC ACTCTCCACC CCTAAGATAC TACTCCTTCA AAACCTATAT
 2151 CAAATAATAC TTTTTTCAGG GTGTGTTCT TTCTTCTTC TCATAATAGG
 2201 TATGAATGTG CCTTTTAATT GTTCTGCCT TCCCCTATAG AATTAGTTG
 2251 CTGGTTTTT TTAATGCTT ACCCTGCCTT ATATAACGGT TACCTGTGTA
 2301 ACAGGGGTAG GACTATTCTA TCTTTATAGT GCTCACCACAA CTTGAAATAA
 2351 CTCCATGCAC AATTGCTATA AAATCTCAA TAAATTACAG CAGTTTGAA
 2401 AAAAAAAA AAAAAAAA AAAAAAAA AAAA

(SEQ ID NO: 1)

FEATURES:

5'UTR: 1 - 188
 Start Codon: 189
 Stop Codon: 1746
 3'UTR: 1749

HOMOLOGOUS PROTEINS:**Top BLAST Hits:**

| Sequences producing significant alignments: | Score (bits) | E Value |
|---|-----------------|------------|
| CRA 18000004891320 /altid=gi 106114 /def=pir A41273 glutamate ... | 998 | 0.0 |
| CRA 18000004924128 /altid=gi 183281 /def=gb AAA58613.1 (M64752...) | 998 | 0.0 |
| CRA 18000004904030 /altid=gi 478699 /def=pir S25852 glutamate ... | 996 | 0.0 |
| CRA 18000004891322 /altid=gi 4504113 /def=ref NP_000818.1 glut... | 996 | 0.0 |
| CRA 18000004904031 /altid=gi 481504 /def=pir S38723 glutamate ... | 990 | 0.0 |
| CRA 18000004938820 /altid=gi 6680087 /def=ref NP_032191.1 glut... | 984 | 0.0 |
| CRA 18000004967647 /altid=gi 227246 /def=prf 16I7121A Glu rece... | 984 | 0.0 |
| CRA 18000005162807 /altid=gi 3402257 /def=emb CAA35050.1 (X171... | 982 | 0.0 |
| CRA 18000004967543 /altid=gi 279674 /def=pir ACRTK1 glutamate ... | 979 | 0.0 |
| CRA 18000004936319 /altid=gi 202868 /def=gb AAA63479.1 (M38060... | 979 | 0.0 |

EST:

| Sequences producing significant alignments: | Score (bits) | E Value |
|---|-----------------|------------|
| gi 12445102 /dataset=dbest /taxon=96... | 1023 | 0.0 |
| gi 8061803 /dataset=dbest /taxon=960... | 690 | 0.0 |
| gi 12066444 /dataset=dbest /taxon=96... | 373 | e-100 |

EXPRESSION INFORMATION FOR MODULATORY USE:

gi|12445102 placenta
gi|8061803 /nervous
gi|12066444 brain

Tissue Expression:
hippocampus

1 MQHIFAFFCT GFLGAVVGAN FPNNIQIGGL FPNQSQEHA AFRFALSQLT
51 EPPKLLPQID IVNISDSFEM TYRFCQSFSK GVYAIFFFYE RRTVNMLTSF
101 CGALHVCFIT PSFPVDTSNQ FVLQLRPELQ DALISIIDHY KWQKFVYIYD
151 ADRGGLSVLQK VLDTAAEKNW QVTAVNILTT TEEGYRMLFQ DLEKKKERLV
201 VVDCESERLN AILGQIILKE KNGIGYHYIL ANLGFMDIDL NKFKESGANV
251 TGFQLVNYTD TIPAKIMQQW KNSDARDHTR VDWKRPKYTS ALTYDGVKVM
301 AEAFOQLRRO RIDISRRGNA GDCLANPAVP WGGIDIDIQRA LQQVRFEGLT
351 GNVQFNEKGR RTNYTLHVIC MKHDGIRKIG YWNEDDKFVP AATDAQAGGD
401 NSSVQNRTYI VTTILEDPPV MLKKNANQFE GNDRYEGYCV ELAAEIAKHV
451 GYSYRLEIVS DGKYGARDPD TKAANGMVGE LVYGSSLQG GKLEGGGRGF
501 DRKSFGGWVA LPTDVYETL
(SEQ ID NO: 2)

FEATURES:

Functional domains and key regions:

[1] PDOC00001 PS00001 ASN_GLYCOSYLATION
N-glycosylation site

Number of matches: 6

| | | |
|---|---------|------|
| 1 | 63-66 | NISD |
| 2 | 249-252 | NVTG |
| 3 | 257-260 | NYTD |
| 4 | 363-366 | NYTL |
| 5 | 401-404 | NSSV |
| 6 | 406-409 | NRTY |

[2] PDOC00005 PS00005 PKC_PHOSPHO_SITE
Protein kinase C phosphorylation site

Number of matches: 5

| | | |
|---|---------|-----|
| 1 | 71-73 | TYR |
| 2 | 206-208 | SER |
| 3 | 306-308 | SLR |
| 4 | 315-317 | SRR |
| 5 | 453-455 | SYR |

[3] PDOC00006 PS00006 CK2_PHOSPHO_SITE
Casein kinase II phosphorylation site

Number of matches: 6

| | | |
|---|---------|------|
| 1 | 135-138 | SIID |
| 2 | 164-167 | TAAE |
| 3 | 179-182 | TTTE |
| 4 | 180-183 | TTEE |
| 5 | 279-282 | TRVD |
| 6 | 413-416 | TILE |

[4] PDOC00008 PS00008 MYRISTYL
N-myristoylation site

Number of matches: 7

| | | |
|---|---------|--------|
| 1 | 14-19 | GAVVGA |
| 2 | 29-34 | GLFPNQ |
| 3 | 247-252 | GANVTG |
| 4 | 348-353 | GLTGNV |
| 5 | 398-403 | GGDNSS |
| 6 | 495-500 | GGGRGF |
| 7 | 506-511 | GGWVAL |

[5] PDOC00009 PS00009 AMIDATION
Amidation site

358-361 KGRR

Membrane spanning structure and domains:

| Helix | Begin | End | Score | Certainty |
|-------|-------|-----|-------|-----------|
| 1 | 3 | 23 | 1.803 | Certain |
| 2 | 95 | 115 | 1.636 | Certain |

BLAST Alignment to Top Hit:

>CRA|18000004891320 /altid=gi|106114 /def=pir||A41273 glutamate
receptor precursor - human (fragment) /org=human
/taxon=9606 /dataset=nraa /length=896
Length = 896

Score = 998 bits (2553), Expect = 0.0
Identities = 484/484 (100%), Positives = 484/484 (100%)
Frame = +3

Query: 189 MQHIAFFCTGFLGAVVGANFPNNIQIGGLFPNQQSQEAAFRFALSQLEPPKLLPQID 368
MQHIAFFCTGFLGAVVGANFPNNIQIGGLFPNQQSQEAAFRFALSQLEPPKLLPQID
Sbjct: 1 MQHIAFFCTGFLGAVVGANFPNNIQIGGLFPNQQSQEAAFRFALSQLEPPKLLPQID 60

Query: 369 IVMISDSFEMTYRFCSQFSKGVYAIIFGFYERRTVNMLTSFCGALHVCFITPSFPVDTDSNQ 548
IVMISDSFEMTYRFCSQFSKGVYAIIFGFYERRTVNMLTSFCGALHVCFITPSFPVDTDSNQ
Sbjct: 61 IVMISDSFEMTYRFCSQFSKGVYAIIFGFYERRTVNMLTSFCGALHVCFITPSFPVDTDSNQ 120

Query: 549 FVLQLRPELQDALISIIDHYWKWQKFVYIYDADRGLSVLKVLDTAAEKNWQVTAVNILTT 728
FVLQLRPELQDALISIIDHYWKWQKFVYIYDADRGLSVLKVLDTAAEKNWQVTAVNILTT
Sbjct: 121 FVLQLRPELQDALISIIDHYWKWQKFVYIYDADRGLSVLKVLDTAAEKNWQVTAVNILTT 180

Query: 729 TEEGYRMLFQDLEKKERLVVVDCESERLNAILGQIIKLEKNGIGYHYILANLGFMDIDL 908
TEEGYRMLFQDLEKKERLVVVDCESERLNAILGQIIKLEKNGIGYHYILANLGFMDIDL
Sbjct: 181 TEEGYRMLFQDLEKKERLVVVDCESERLNAILGQIIKLEKNGIGYHYILANLGFMDIDL 240

Query: 909 NKFKESGANVTGFQLVNNTDTIPAKIMQQWKNSDARDHTRWDWKRPKYTSALTYDGKVM 1088
NKFKESGANVTGFQLVNNTDTIPAKIMQQWKNSDARDHTRWDWKRPKYTSALTYDGKVM
Sbjct: 241 NKFKESGANVTGFQLVNNTDTIPAKIMQQWKNSDARDHTRWDWKRPKYTSALTYDGKVM 300

Query: 1089 AEAQSLRRQRIDISRRGNAGDCLANPAVPWGQGIDIQRALQQVRFEGLTGNVQFNKEGR 1268
AEAFQSLRRQRIDISRRGNAGDCLANPAVPWGQGIDIQRALQQVRFEGLTGNVQFNKEGR
Sbjct: 301 AEAQSLRRQRIDISRRGNAGDCLANPAVPWGQGIDIQRALQQVRFEGLTGNVQFNKEGR 360

Query: 1269 RTNYTLHVIEMKHDGIRKIGYWNEDDKFVPAATDAQAGGDNSSVQNRTYIVTTILEDPYV 1448
RTNYTLHVIEMKHDGIRKIGYWNEDDKFVPAATDAQAGGDNSSVQNRTYIVTTILEDPYV
Sbjct: 361 RTNYTLHVIEMKHDGIRKIGYWNEDDKFVPAATDAQAGGDNSSVQNRTYIVTTILEDPYV 420

Query: 1449 MLKKNANQFEGNDRYEGYCVELAAEIAKHVGYSYRLEIVSDGKYGARDPDTKAWNGMVGE 1628
MLKKNANQFEGNDRYEGYCVELAAEIAKHVGYSYRLEIVSDGKYGARDPDTKAWNGMVGE
Sbjct: 421 MLKKNANQFEGNDRYEGYCVELAAEIAKHVGYSYRLEIVSDGKYGARDPDTKAWNGMVGE 480

Query: 1629 LVYG 1640
LVYG
Sbjct: 481 LVYG 484 (SEQ ID NO : 4)

Hmmer search results (Pfam):

Scores for sequence family classification (score includes all domains):

| Model | Description | Score | E-value | N |
|---------|---------------------------------------|-------|----------|---|
| CE00269 | CE00269 kainate_receptor | 646.8 | 1.1e-190 | 1 |
| PF01094 | Receptor family ligand binding region | 101.4 | 1.4e-27 | 1 |
| CE00294 | E00294 glutamate_receptor_6 | 47.5 | 5.9e-14 | 1 |

Parsed for domains:

| Model | Domain | seq-f | seq-t | hmm-f | hmm-t | score | E-value |
|---------|--------|-------|-------|-------|-------|--------|----------------|
| PF01094 | 1/1 | 55 | 391 | .. | 56 | 464 .] | 101.4 1.4e-27 |
| CE00294 | 1/1 | 347 | 479 | .. | 376 | 507 .. | 47.5 5.9e-14 |
| CE00269 | 1/1 | 21 | 484 | .. | 42 | 544 .. | 646.8 1.1e-190 |

1 TTCAAAGTAG TAAGATACAA AAACGTAAAAA TGGAGAAAATT AAAAGATGGA
51 ATCATTAAT CAGAGACTCT TAATGTTGGC AGAGACCTTA GAAGTGTACT
101 TTCCGTATT TGTTCTCTCA TCTTCCTATG CTGATGCTTA TTCTTCCTT
151 AGAAGGTTCC TACCCAGTGC TTGCTGTAT TAGAGCTAA GAGTTAAGAG
201 CTGGGGCCTG ATGGTGCGAT TTACTGTGTT TAAATGCCA ATCTCTTC
251 TTAGCAGTGA AAACCTGGG TGAGTTTTA GACCTCTGTT TCTTCATCTA
301 TAAATGGC ATGAGGCTAC CTACACAGT ATTGTACAAA TAAATGATGC
351 AGGTGCATT CTTAGCATGG TACCTGGCAC ATTCAAAATA GTGAAAGTGC
401 ATTAGCCTTA AAAATTATTT TAGCTAATT ATTAAATATAT GTGAAAGTGC
451 ATAGGAAATC ACAAAGCATT TGACCTCAA GTTGTCTTA TTTTGGGCT
501 TCATTGTACA TGGTCAGATA TTTTTACAA ATCCCAGTCC TTGAGCTGT
551 CACTCAAGTC CACATGATAC ACAGTCTGG TGAGGGAAAGT GAAGAGTCTG
601 TGGATAAAAT GGCCTATTCA TATGCCAAAG CAAATGGAG TCCAAAGTCT
651 ATTATTTCTT TCTTACTAAAC GACAAAGTT ACTTTCTTT TCCCTGGATCA
701 TCTCCTGTG GACAGGAGTC CTGGCCAGGG CAGTAAAGTCA ACTGCTAACG
751 GCCAAAGCAC TCAAGTTGT AGGTGTACT GTACATCTTA GTAGGTCTGT
801 GTCTTATGA CTTAATCCA GAAGTCTTAT CTTTTCATC TGTAACACAG
851 GGCTCATGGC CACTTACAG GTTGGAGTG AAGATAGATG GATAAAAATC
901 TGTAAAGTTC CTTCAAAAC TGTATTCTGT GGCGCTAGT GGCTGCTGCT
951 TTGCATTAA CACTACTATC CTGAACACAG CTGATCTCTC TACAGGTTAT
1001 TTCAGCAGAA GGCCTGGTCT AGGAGACTCT ATGAGTTCC AGCTTACACC
1051 AGACATGACC AGCATCCAGA AAGACCTGAA AGAACCTTGA ATCTCTCAC
1101 TAGAATCCCT GCAAAATGAC TCATGTAATT GCTCTGTGTA AGTATCCTTA
1151 GTCTTATTG TACACCCACA CGATTCTGAT GCTATAGACT CCTGTGGAAT
1201 GCAGGGAAAG AGAGAAGGGG GCCCATTAA AATGCCTAGG ATTGAAAAGA
1251 GACCACCGTT TCACCTGAA AGGTAGACAG GGACTGTCAA ATACCTGGTC
1301 AAAATACCTG CCAGTCAC T CAGATCCTCC CTGTTTGTC TATCTGT
1351 TCTCTCCTT CAGAGAGAGA AAGCTTTTT TTTTTTTTCC TTTAAATTTC
1401 CTAGGAGGGA TTTCTAGGGT CTTTCTCTCA GGAATTAGTT GTAGGAATAA
1451 TTGGGCCAGT GGAGTGCAGG AGATATATCC AGGCCAGGCC ATGCACTCT
1501 AGAAAAGTG ACCTAGATCA AGCAGCTGGT GGATTGAGGA CTATTGTGGG
1551 GACCCCTGTC CACCTACTGA CTTACAGCTG AACCCACATT CCCAGCAGCT
1601 TCAGCCTGGG GGCTGGGGA CGCCAGAC CGAGCTCAGA AAGGCAGGGG
1651 AGGGTAAAGA GGACTGTGGG GTTCCCCCTC TCAAGGACCAA GTGCCACGTG
1701 TCACACACCC CACACCTCAC CTTCTGCAC ACACAGAAAAG GAGGATAAAGG
1751 TGAGGATGGG AGGAAGGGG AACAGGTAGG GAGGTGGCT GTGGAACCTC
1801 AAGCTAGCTC GGTGGGTATT AGCATAGAGC TTGCTGCCTG TGTGAGTGTG
1851 AGGGGGAGAG CGAGAGAGAG CAAGGGAGGG AGAGAGAGGC AGGCTGCGAG
1901 GGGAGAGGAG AGGGAGTGGG GGAGCCAGCG CTCCAGCTAG CATGAGGAGC
1951 GGCTTCTTTT CCCGTGCTCA GTTAATCTGG CTGTCAGTTG GTGTTAACGC
2001 TGCAGTTAA GTGTTGGAT TCCAAGGGAA ACAGACAAAC CTCACGAAAG
2051 GAAGGAAGCA AGCAAGAACAG GAAGGAACCTG CAGGAGGAAA AGAACAGGCA
2101 GAACAGCGAG AAAATAAAG GGAAGGGGG GGAACACCCA AATCTATGAT
2151 TGGACCTGGG CTTCTTTTC GCCAATGCAA AAAGGAATAT GCAGCACATT
2201 TTTGCCTTCT TCTGCACCGG TTTCTAGGC GCGGTAGTAG GTGCCAATT
2251 CCCCAACAAAT ATCCAGATCG GTGAGTGAGG GGGCAGCCTG GGGAGGGACT
2301 TTCTGGGTCT GGCCAGGGAT TTTTTGGGG ATAAGGGTTG TGTACCCCCCT
2351 CCCCCGGTACT GACTGTGTTG CTTGCTCTCC TAAAGCTGTG CTGCGGTAAC
2401 AGAAGGGAGA CTTGGGCTTA CAGCCAGAGG AGGGGCTTC TCCTGATCGG
2451 ATGAGGGGCA GAGGGGAAGT GTTACACAC GCACACATAC CCTACTCGCA
2501 CTCCAGGCAA GAGCATGTGA AATGGAGGA CCATCGCTT GGAGGAAAAA
2551 AAAAATCAGG CTGGAAAGGG TGTTGGGTGT TTAAGGAGTT AACTCTATTG
2601 CTTGGTAGAT GGTGCTTGTAT TCCATTAAAT ATGTAAGTAT GTATGGTGTG
2651 TGTGTTTCAGTGTAT TATATTAC ATATGCACAT ATATATGTAA
2701 TTGAAGGGAGG CAGTGCTTTC TCTGCTGGG GACAGAAAAG AGACCCCTCGA
2751 GAAGAAGGAG TGAGGGGTG TGTTGTATT GCAGCCACTG AAATAATGCC
2801 AGAAGGCC CACTCCAAGG CGGGTAGGCT CCCTCTCTG TTCTGGACTC
2851 CTCCAGCTGC CTTCTCTTG CTGTCGCGCA TGCTGCGCTG GTGGTCTCCA
2901 CTCCCCCGAT CCTGGAACCT CCTCGCTGC CTTTCTCCG TTCTTCCTT
2951 GCCCCCTCTT CTTAGATTTC CTATCACAG AGGTCTACCT TTTACACACA
3001 CAAACACACA CACGTACACA TGCTCTTTC TCTCTCTGTT GGCTCTCCAT
3051 TATCCTTGT ACTGGGCTC ATCCTCTCAA CTGGAGGGCA GGTTCAACA
3101 TGCTGCATGC TTTTTTTCTT CCCCCATTCC CCTCTTCTAGT GTTTACACTT
3151 CTCAAAGGCC CCGCCACCC CCGCTGATTT CTGAGGGGAC TGACAGATAT
3201 TGCTACTCCT GATAATCATG AGGGAAAGCA AAACAAACAG AAGCAATAAC
3251 ACCAATCACA AAGCATGTCC ACAAGGGCTT GGGGCTTCG TGTGACCAGC
3301 ATGTCAGTGT CGTTTGTC CCGGAATGAA GCAAGCTGCT GTGTTGGAA
3351 GCATCTTCGTT TGTTGGTT TCTAGTCTCT CTCCTCTGGT AGGGAGATAG
3401 CTCCACTAGG GAAAGTTCGC ATTGCTGGGA GTTGTGCTC TTTTGTGAGT
3451 GTGTGTTGA GGGGGATGT GGTGAATTG ATATTTGTGTC GGGCATAACAT
3501 GTGCTGCAGT ACCCATCTCT TTCAAGCTCT CCAGCTAGCT GGCGGCTTGG

FIGURE 3, page 1 of 122

3551 AGTGGCCATG GAGTAACATTG CTTTGTTC TGACACCTGT TAAGCTACAT
3601 CCTGAAGTGT GTACGTATCT GTGTGTTAGT GCCTAACACG CAAAACCTC
3651 TGCCTTCAGG GGAGACACTT CCCTGTAGC CCAGCCCCGTA GCCTTCTACT
3701 CCTCAACCTC CCATCCCTTC TCTTCAFFTC ATTGCAGAGG AGGAGAAAGG
3751 GGACAGGGAA GTGTTGGGG TGTGGTCATC TGGGGGGAAAG GGGGACCATC
3801 ATAATCAAGA ATTTTTTTTG TTTTCATTCT TAAAATGGG AGCACTTGTA
3851 CATGTGGAAA TCACTGGCTC TTACATGTGG CATTGTTTAC ATTTGTGCTT
3901 ATATACTACC TATCCTTGT GGCTTGGAAAG TGTGTTGTCTA GTATATTGT
3951 GTATATAGTA AATGGTATAA ATGCATGAGG ATGTTTCATG TATGTCTAT
4001 GTTTTCTCAT GTATCTCTGC ATATTTAA AATTATATT AGCCCTAACT
4051 TGGTGTTCAGT ACTGATAAAG CCATGCTAC TGTGTTCAA AAAAAGAG
4101 ATTGAAGCAT TAAATTGTAG AACAAAATGC TGAAAATATC ACTGCCATCA
4151 GGTAGTACTT GATTCTATT GTGTGATCTA TAACAAAAGG CTTGCAATCC
4201 ATTTATTGGT TCTTAAACAC AGACACCCAC TCTACAAGAA GTTAAAGTG
4251 CATTATGTT GGACTGTGAT TACTGTCAGA TTTGAGATAA ACTTCTATGT
4301 AAACATCATT ATAGTTCAGT CTCTAGAAAT GGCTGATTTT AATTACAGA
4351 AATGTAATTG ATTTACATGT TGACAGTAAA TACAAAGGTA AGCCATGGAC
4401 TCTTGTTC CGGAACAGGC ATCCCCTTCAG GCACCTTTAC TATACCTTT
4451 ACTAGAATAG AATGTTGTGA TCCTCTTGTAG ATGCCTAAGA TCCCACATCT
4501 TTGAAAGCACCA AGGTTCCACC ATGCAAACAC ACAATGGCAA TCCCTTATGT
4551 AACAAGTCAT TCCTAGGAACTGGATCAT GTGTGGTGAA AGAGTAAGCA
4601 AACATTGTT TGCAGAAAAG CAAGAGTTT TAGAGAAAAT GAATAATAA
4651 CCTTAGGGC AATAGAATAG TTAAATTGCA TGCAAGGCTT GCTAGGCCAA
4701 AGACTAAAAAA CTGTCATGT AAACAGTTAT AGTAGTGGAG AAGCCCACAG
4751 GGTCCCAGAG CTAGATTCA ATCACCCCTGC AGCACTGATT AGTACCTACT
4801 TCCCGTAAGG CTCTCTGGTG AGAGATGAGG CTGATGTAAG AAAAATTAGA
4851 CATGACTAGA GGGTGAGGGG GCTTATGTGT ATGTTTATAT AAGAGAAATAG
4901 CAGCTCTGA GTGGTTGCA CAAGGGAGGA AGAAGAGAAA TGGCACAAAGT
4951 CTCTGTTT CTCTGACTTT AGCTGAGTTG AGGGGTACAC AATCAAATGT
5001 TTGAGCAAAG TAATAGATAT TAGAGGCCA TGTCACAAAAA AAGCTCATCT
5051 GTAGGAGTTT AAGTTTCAGT GTCCAGTTAA GCCTATTGTA ACTCTCATCT
5101 CTACCACTCA AGGCTACAGC TAGTGAGTTT GGCAATGGGGAAAGAAAAGG
5151 ACTCATCTGG AGTGAGTCGT GAGGAACCTAA AACCTGTCTC TAGCCCATAT
5201 ACCATGTTGC ATTTCTTTT CTCATAGGGG GATTATTTC AAACCAGCAG
5251 TCACAGGAAC ATGCTGTTT TAGATTGCT TTGTCACAAAC TCACAGAGCC
5301 CCCGAAGCTG CTCCCCCAGA TTGATATTGT GAACATCAGC GACAGCTTG
5351 AGATGACCTA TAGATGTAAG TAATTGCTC TATTTCTGAG ATGCTTTCT
5401 GCGCTAGACC AATGAAAGGA GGGCCTGTGG GTAGGTGGTG GTGTTGCAA
5451 AATGACTTCA GTTGCCATTG GTCTTGTAA GAGAAAGGCC TCCAAGAAAA
5501 ATTTCTAGAG GCTCTGAGT GATTCCAGCA GTTGGCATTT TAGCCCTGC
5551 AATGCTTCAT GTAATGGATT TGCTTTTCA CTGTCAGCTA ACTTTAATGC
5601 CAGCACGATG GTGTGTTGGG TTGACTGCAT CTCCCTTACCT TTGCAGAGGT
5651 TTTCTGGCAC AGCTGAGAGA GTTTTACACA TACGAATCTT CTGAGAGGCA
5701 TAGAATTAAAG GGTCTGAGT TTGTAAGGTTAAG GTGGTTTAAAG TGCTTAAGG
5751 CATTCTCTAT CTACATGTTA AATGGACAGA ATGTAAGCTTG ATAAGAAATA
5801 ATAGCTGAGA AGTTGTACAC ATCTGGTTCT TCATTTCCGG AAGTGACCAA
5851 TAATTTAAAC TTGGTGCCTT GGTCAATTAA AAAATAGCTT GAGGAAATTG
5901 GTTGTAAAG GCACAGTTG TAGGATGGTC ATTGAGCATC AAACAGAAC
5951 AAGGTGGCCTA CAAGAAGAAG GGATAGATAA ATCTCTGACA TCTGAATTGA
6001 ATGCATTGTA AAATGTGGC AACAAACACC ATTCTGAGTT TTCTGGCAA
6051 CTAGGAATGA AAAGGAAGCC TGTGTCACAA TGATGGCTT TTCATGACAG
6101 ATGAAAGCAT AAAAATTAAAT CAGGAAACAT ATTTCCCTT CAGGGATTAA
6151 GCTCAAGTAA AAATTATGG CAGGAAATG TGAGCTGAAT TCACAAGAAC
6201 AATTGAGAC CCCAAACTGG ATTGAATTGG CACCATAGTC TTGGTGTGTC
6251 ACTATTGACT TGGTGACTTC TGCTGAGCTG TCTCTGGTGG AAGTCATGGA
6301 CCATATTCTC TTTGTGTCT TCTCATAGTC CCACCTGGTGA GTTCTCAATG
6351 ATTTGAATAG GCTATGTTT GAAGTCCAA AATGAGAAAGT CAGAATTCTT
6401 TCTATCCCCA AGACCACTCC TAAAATAATG TTGTTACAAA TTCCAAGAAC
6451 TATAATTATA GCAGATTCA TTTATTGAGA ACTTACTGTG CATCAGAACT
6501 ATGATAAAATA CTTTATAGTC ATTTATAGTC ACATTCATTA CCATGTATTA
6551 AGCACTGACT ACAGCCCCATG TAATGCACTA ATTGCTTTTT ATGTGTTAGC
6601 TCATTTAATC CTCACAGGAG CTTTCAGAG TACTAGACAT TATCTTCTT
6651 TTAGAGATGA GAAAAGTGGAG GCTACAAACAG ATTATATAAC TTGCCCAAGG
6701 TTACTCAGGA AGCAAATGGT GGTTTGAGA CCTGAAGGTC CATGTTCTG
6751 GATACTGTGA CAGATACACT GATTCTTATG GTACCTTAAT CAACTAGTGG
6801 GATTACCCAA GAAATGAAAG GGAATTTCAG GGGCTTGTGA AGGCAGAGGT
6851 CTAATAAAAGT ACCTAAAGGAG AAAAACTTAC AGTGTGTTCAA ACTGTAGCTA
6901 TGATTTGCAC AGGACTGGTC CATTGAAATAA ATAATAGTC AATTCTTCAT
6951 TTGGTAAATG CTGAGGTGA AAATCTTATC TACTGTGTTA CTCACACCC
7001 TAAAAAAAT AGCTGAAGTT TAATTGCTGA ATTTAGTTC TATGAAACTA
7051 TCTTCTGGG AATCTAGAAT AATACTGAGT AGCTATTGTT CTATTAGATA

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7101 ACCTTTCTT ACTTTTAAT GTGGCTTGA TTAGGGTCTT TGGAAAGGGC
 7151 ATTTGGTGG GGGCATCAGT GTACCTATAA ATGTTAAC GCATATACAT
 7201 GTGCTAATT ATTCCCTGGA GCAGGGCTCC ATAGCTTTG TCATACTTA
 7251 TAGCTTTGT ATTACTTGCA TAGAGAATCA AGAATAAATA GCTGGTGT
 7301 GTATTCACTC ATGCTGCTGA GAAATATCTA CAGCAGGTT TGGTTGAAAG
 7351 AGATGTGAAC TGCTCTCTA GTAGTGTCAA GATGTTGACT GGCACAGCAA
 7401 GAAAATAAA GACAAAAATA GGAGAAAAGG TTCTAAGGCA AAAGGTGGT
 7451 CTTCCTGCTT GTTATCTCAG CAACCTAAGA CTTGATCTC AATAGGGTA
 7501 ATGACTGTT ATTAGGGAGA CAGAAATATG ATACAGACAA TGTTGTCAT
 7551 TTTGGTCAAC AGGCCTGGAG TGGATGAATC TGAGTTCTG AACTTGATGC
 7601 TGCCATCCAT GAACTAGTGT ACAGGTTCC ATGAATTCTC GTCTTGTTCG
 7651 TTCAGTTAAT TCTTAAGTG TTTCTCAAA GCTATAAACT GAAATAGATA
 7701 TTGGAAATAC AGAGATGATA AAATGCCCT GCTCTCAGGT AGCTTACAGT
 7751 CTAGTGGGAA ACATTGTTAT GGGGATTATC TGAGAAGCAA TAATCTTATT
 7801 TTGTGCTTAG ACTTTGTGTT TCTTTCTT AGCTCCAGA TCCCAAAGGG
 7851 GGTACTGGC AAGTTAGGTG GAAATGGTGG CCTGGCTGGA GGAGCCTCTC
 7901 TTAAATTCA TGTAAGGCTA GGAATACTTT AGGGTGTGT TCACGTGGT
 7951 CCATTGGTTT GGGAAAACCT TACATCTGTC CCAATTAA TTGAGTAAA
 8001 AATGTCAGTG GGAGCAAAGC AGTTTAAGGA AGAATGTACT CATTACTGAT
 8051 ACATGGAAA GCAAGAAAAG CATCTTATTG AGACTAATTT TCTGTGCTGT
 8101 TTTTTGAA ATTCTGAATTG TTAGTTGCCT TAAATTAACG GCCCAATAAAG
 8151 TCTTAGATCT AGAAAATGAC CAAATTTTAT TTGTTTTTT TTCTATAATT
 8201 TTGCTGTCAT TTGATTTTT CCCTTGCAT TTGCTTATTG ATTGCTCCCTC
 8251 CACCAGAGGG TGGAGAAGGG AAGGGAGAGG AAGTGTAAATG GGACTGTT
 8301 ATGCTAGACA TGTTAGCAGC AGGGGACTAA AAATGAGGAG AGGTGGTTAT
 8351 ATGGTAGGGA AGGTGGGAA GATAGAAGAG GACTATGGCT ACTACTACTG
 8401 GCCAAGGGTGA GAGTTGGTGC CTTCTTCGTT CAATCTT TCTTGCTTCC
 8451 CTGGCTGCG ATTGTTAACG AGTAAAGCCA TTGATCAGC AACCCAATGC
 8501 CTTGGGATCT CCTTTAAGCA CTTTCAAGG CTTACAGGGG TAGAGTTG
 8551 GGAGATTGTG CATAGAGAAG ATATTTACTG ATCAGCTACC CAGCTTATT
 8601 TGGTGCCTT GTGCTAAGTG TAAATAAAGG AATAAATGAA ATGCTGATTG
 8651 AGATTATTAC TATTAGAGGT CTGAGTAGCA TAGTTGCAGC TTAATTCTTA
 8701 CCTTTTAATT TATTCACTA TTTATTCAATT CATTCAATTCA GCAAGTATAT
 8751 ACTGAATGCC TACTTCATGC CAAACACTGG GCCAGACGCT AGGAATATAG
 8801 GGGCCAGGAA AGAAGGCACA GCCTCTTCC TTGTTGGAGCT AACAGTTAG
 8851 CCCAGAGGTT CACAAACCTC AGTGCACCTA AAATTCACTC AGGGAGCTTG
 8901 TTAAAGCAA GACTCATGAT GAACTTTTA CTTCTTGAAT CAAGATATT
 8951 AAGAGTAGGC CCTGGAGGAA TTCTATAGCA ATTATTATGG GGATTACACT
 9001 TTAAGAATCT CTTTAATCTA AAAAGCTTC CATCCCTTA GTAAGCATT
 9051 TTGAGGCCCTC AACCAAACCT AGGCATGACA TAAAGTGCTA CAAATGCAGA
 9101 CAACAGTAAG TTGCATTCCC CACCTGGAG TACTTTATCC ATAGTAAGAC
 9151 ATTTTCTATC CTGTAAGAG AAAATAAAAA TGTAATGTTG TAAGTGTAT
 9201 AGCAGCAATT TGTATGGAGT ATTGAAGATT CTTGAGAG TGGAGTTTT
 9251 CTCTAGGAGG TGGTGTATTGA ATTGAGCCTC AACGATAAAT AGGGTTATCT
 9301 ATCTGCAGAA GGGGTCAACCA AATATAGCCA TCCACAAGCC AGTCCAGCA
 9351 CAGAGACTGA GTTCTGGCC CACACTGT GTAGAACCA TGGAATTTC
 9401 CATTAGAACT TGGACATCTT GTCTTGACTA ATATTTTAA ATATTTAAAT
 9451 ATCTGGCAAC ACTAGGGCCC AGGTCTATGC AGCCTCAATT TGCTGAGATG
 9501 GGACAGAGTA AACCCCATCT ACATGCCCTC TTCCCAATC AGCCCATTCT
 9551 TCCCATTTC TTTACCTGCT GGCTTGGCA AGCATTGAGT TTGCAAGCCC
 9601 TGATTGATAG CACTGCAATG TTGCTGTGT TGTGTCTTAA TAGGTTAGCT
 9651 TCACCACCAAG AATATAAACT GCTGTAGAA AGACCATGTA TATCTATAGT
 9701 TTAGTGTGTA GAACACTTGG AAATGCCCTC AATACAAATG AATAAATGTC
 9751 TGTAGGACTG AGGGAAATTAC ACACCATAAA AATGTTGAGA GCCTCAATGA
 9801 CAATAGGTGA AAGGTAGCAA CCCTAACTAC AGTGGGATGC CCTCTGTCAT
 9851 GGACACTG GGGAGGCCA GGGGCTCCT AACAAAGACAT TAGGCACACTGG
 9901 CAACAGAGAG ATGGCCTTAG CTCTGCCCTG AACATGGCTC ATCAACTTCA
 9951 GAGTTGCAAC ACAGATTGT TTTCTTGAC CTACACAATG CTTTTCTATA
 10001 TTGGCATAAA AAATCCAGAT TTCTGGCATC TTTAAAAAAA AAACCTAGGG
 10051 CATTAAACCA CCCTAGGCC ACATTCCTGC TTAACCTCTA TTTTCTAGAG
 10101 CTGAGAAGTG CTGCCCTTT TAAATACATA AACTCCCAAG TTAACCAAAG
 10151 TTCCCTTAC TTCTGTGTT ATTGCTAGAG TAATCAAATT ATGTTGTTG
 10201 GGCAGGCCCTG TAAGTAGGCC AATCTACTCA TACCTGATTT ATATGTCAG
 10251 CATTCCATCAT TTTATTATTT TGTCTAATA ATATCTATTA CTTACCCCTGT
 10301 CAAAATAAT AAAAGACACA AAAGATGTAT AACTCCTACT CTCAAAAAAA
 10351 GTAGTGTCTA TACACTAATG AAGAGAATGG TGGCTGATGG TGGGATAAAC
 10401 AAGAATTATT TTGAAGACCT ACTATGTTGCC AAATACTTTG CAGGTGTTGT
 10451 CTTAAGTTT ATAACCTGCT TGAAAGGTGA TTATCCCCAT TTCATTGATG
 10501 ATGGTACTGA GACTGAGAGA GATTGTGTCT TCTTTATATT ATGCAACAAA
 10551 TAAAAACCTA AGCTAGTATT TAAAGCCAGT TTGGGGGGCT CCAAAACTCA
 10601 ATGAGCATTC TCCTTTAAA GATCTATGAA TATGGCCAGG GGCAGTGGCT

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10651 CACACTTGT A ATCCCAGCAC TTTGGAAGGC CGAGGTGGC AGATCATGAG
 10701 GTCAGGAGAT TGACACCAC CTGGCTAATA CAGTGAACCC CCATCTCAC
 10751 TAAAAATACA AAAACTTAGC TGGCGTGTT GGCAACGCACC TGTAGTCCA
 10801 GCTACTCAGG AGGCTGAGGC AGGAGAATTG CTGAACTCA GGAGGCAGAG
 10851 GTTGCATTGA GCCAAGATCA CGCCACTGCA CTCCAGCCTG GCAACAGAGC
 10901 GAGAATTGT CTCAAAAAAA AAAA AAAAAAAA CCTATGAATA
 10951 TATGGACAGA GAAAAGTAC ATAGCAGTGA AATAGCCCCA CGGTAGAAGT
 11001 GTCACAGTGG AATTTATGAT TCAAGCTTAA GAGCTAAGTC TTCCAAGGCA
 11051 GAAGCTATGA CTGTGGATGA TGAAAACCTC TTGGGGAAAGG TGGAACTTTA
 11101 GCAGGCATTA AAGGGTGGAG CAGATTTGG TTGTGGAGTG GGAGGAGGGT
 11151 ATTGAGTGT GGTAAAGTCA CAATATTCTC CCTCGCCTCC CCTCAACCAC
 11201 TGCTGCATAT GCTTGTACG ATGTTGGTGA GATTGGGAGG TTTGCCCTCT
 11251 GCACCAACT ATGTTCTCAG CTCCATGGCA GATGTCTACA TTTCTCTGGT
 11301 TAATGTTACA GTCTGAAGTT GGCTCCTCAA TCTTCACCCG TGCCCTTACA
 11351 TTAAGGCACA CAAAGTGTGA CATTGTCTG TGTTGACTC TTGGCTCTTA
 11401 TTATAATATT GATAATCATC AGCTTTATG GATAGAAAAA TCCTTGTAAA
 11451 CATTCTTTC CCTGACTAGT TTGAAGATCC TGCTGGGATG AGTGAGCTTA
 11501 CTGCTCTCCT CTCAGCCACT CAGGATAAAAG TGATCATATA GCACATTGG
 11551 AAAACTGGTA AGCTTCATGT ATTTGTTCAT TCATTCACTC ATCCGAAACC
 11601 CTTTTATTAT CACCTCTAT GGGGATATGT ACTGTCACTG CCCCCACTCCA
 11651 TACCTTGTGA GACAGATTA GTTGATTACA GAATTTTTTC CCACTGAATC
 11701 TACACGTGGC CTCAAATTGG TGACAGCTGA TGCAAGAGAT GAAATCATT
 11751 TTTCATTACA AGGCATGCA CTAGAAATTG AGAAAAAATAA AATGCATTAG
 11801 GCATTGATT TCCCTCTAAG GGGCTCAGGT TCTTATAAAG GAAATAGGCA
 11851 TAAACCAAAT CTGCCCTCTC TTCTCTCTC CTCTCTCTC CTCTCTCCCC
 11901 CTCTTACATA CACACACACA CACACACACA CACACACACA CACACACACA
 11951 CATTCAAGGG AAGGAAGGAA AACCTTTAGT TGGAGGGATT TAGGTTTCAT
 12001 AAAACAAGGA CATTGAGTT GAATTGGAA AGATAGGTAG GATGAGATG
 12051 GGAAAATATA TATGTATATA TTTGTATACA CACACACACA CCCCCACAC
 12101 CTTCCTGTAA TGGCAGGTTT GATGCAGTAA ATAGCATACT GAGTTGAGAT
 12151 TTGAAGACAT GGATTCAAAT GCTGGACTAC CTCTTGAAT CGTTTAGGTA
 12201 TAACTTGGA GAAACATCCC CTCCCCCAAG CTTATTATA AAATGAAGCT
 12251 CATGGTCTCT GAGAGTCTT CTGGGGCTGT ATTTCTATGC TGGCAGCATA
 12301 TGAAAACAC CAGAGATATA TGATTAATAG AAGTTCTCTA CCTTTGGCTA
 12351 GCAAGAGGAT CCCTAAACAA GCTAAGTGTG TAAGGAAAGC TCTAGACTTC
 12401 CCTTCCACCA ACTTGACACAT TCAGGGCGCA TTCTGTATGC AAATGCTGAA
 12451 GCATTATGCC TACTTTGGGG CCTCAGATGA ATTCATTCAA TATTTAACAA
 12501 ATATTTATGG AGTGCTACT ATTGTGAACA AAACTAGAAA GCAGCCCTGT
 12551 GCTCATGGAG CTCACCAAGT AATAAAGGAG GCTGCCATTA GATGATCACA
 12601 TGAATGAGTG TATAGGTGT AATAAACAACT CTGAAAGAAA GGGCCATGAT
 12651 TCTATGAAAG CATATACAAA GGAACCCAGCT CGTGCAGGAG GATGAATAGG
 12701 TGCTTGAGCT GGGACTGAA GGCTTGGTG ATGCAGTGT GGGAACAGGA
 12751 GGAGTGTGTT AGAAGCTTCC TGGGAGGAGG CCTGGCAGGG CCTTGAGGC
 12801 TCTGTTATGG ATTTGATCT TTAGCTAAA CACTAAAGAA CCCATGGAAG
 12851 GGTTTAAGC AGAGAAGTGC CGTGTGTTAGA TTCTGTTTT CTCATCAGAA
 12901 ATCAGATGCT TGATAGTACT TTGCAAATT CACATTGCT GAAGACGTCT
 12951 GGCTTGTGTT TCAATGGCCT TTGTTCTTCA CTTCATCTC CAGTTGGGA
 13001 TGGAGTCTGG CAGATGGCA GGAGGATGGG GACAGAGGCC AGGGGAAAGG
 13051 GAAAGCTGATG ACTTGGTTA GGGGTGCTT GTCATGGTAT GTGGCTCTCT
 13101 CTGTGCCCAT GGGCATTCTT GGAGATTGGA GGCTGATCCA GTGCACTGCC
 13151 TGGAGAACTG GTGAGGCTGT GTGGAGGCCAG GGATTCTTC AGAGTCCTCA
 13201 TTATTTTAA CAAGGAAGAC ATACATAGCA CTGAAGCTCA GCCTCTGTT
 13251 CAATCAGACA ACTCAGTGGT CTTCAAATTC ACACGCCAT TTCCCTCACT
 13301 TACACTTACA AACTGCTCTT TCCACTACTGC TCTGCTGAAA TTCTGCTCTT
 13351 CTGGTCAGGG CTAGCTCTT TTTTACCTTC TTCACTGAGC CTTTTTCTC
 13401 TTTCATATTAC ACATGCTCTT CTGCCCTTCA GCTGTTTTA CCATCTCCCT
 13451 AGCAATGGTC ACGCTTATCC CCAGGTTTTA CTCACCTTGT CACTTGAACA
 13501 CGTGTCTTAC CTGCCCAACT GGACTAAGCA ATGTGAGGTC AATGACCTTG
 13551 TTACTTTAG CTTCCCATCA CAGTCTCAC CACAGTATAG TGTTCACTGG
 13601 TGCTAGATGA ATGAAAGAAT AGATGGCAGT GACAAGATA AGCCTGAATC
 13651 ATTGCTGCTT AGGGTAATGC TTTGATATT ATGAGTTTTG AGAGTCCAA
 13701 CAGGGTGTG TGAAATACC TATGGATGGT TATTACTGTG TAGCTCCAAA
 13751 GTTATGGGG TGAAAATCAG GTGTAAGTCC AATTGAAGG TCATTTAGC
 13801 TCCCGCTGGA CTATTGTCAT GAGGGCTCCT AAATAAGGTA TAAGGTTCCA
 13851 TCTTCTAAAT AAAGAATTTC TGATTCAGC CCTGGGTTTG CCATTGATGT
 13901 ATGAGCCTTG TATGCATCTT ACGACTTTGG TGTGTCCCAG CCTGCTGTCC
 13951 AGAAAGCACA GGGGAGGCCA GGGCCATGGG AGGTCCAGGT TGAGGAGGCA
 14001 GGCAAAACTG GGGCAAATGA GGCAGTTGGA GGCTAATGAA ATTGATACCC
 14051 TATGGTTAGG CGTGTCTTCA TGTGTCTTCA GTTTGGAAACC TCTAGGATGA
 14101 AAATAAAGTT TGAGAATAGC CTTAGTTG TCTACAAAAG TAATATATAC
 14151 ATTACAGAAA GCTATAGGAA CAGAGACAGC AAACACAATA AAACTTGTAT

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14201 AATTATAGTA CTAAGGATAC ATTTTCCATC CTTTTTGAA CCTAACATT
 14251 TAAACATTA TAGATTATC TTACTGTCTT ATAACATGAT TTTTGATA
 14301 TTACAACCTT TAGGCTACTT TTATTATTGC ACATTCATT TTAATGGTT
 14351 CATAAAAGCC CACTGTACAT ATGTACCCTA ATTATTTAA GCTGTCTCT
 14401 TTTATGGAT ATCTAGTTA TTCCCTTT TTTCTTAAA ACAGTGCTGT
 14451 GATATTCTC TCAATAAAAT TTTAATCATT TGACATATT TTGTTGTGAT
 14501 TTTAAGGGAA CTATAAACCC AGTAGAACAA TTCCAATGA AATTGAATAA
 14551 AATTCTAGT ATGTGCAGAA CTTGAGATAA CTGTTTAAT GTGAGTTCTG
 14601 ACATTGACTT GCTGTGTAAC CTTGAAAAGC TTTTATATCC AGTTTAGTT
 14651 CCAGATGTAT AATATGGGT GCTAATACCT GATTCTAAA CTTATTAGAA
 14701 CAGGCAAGTG CCATTATTTG TATGAAAGAG CTTGAAAAA TCAAACATGC
 14751 TAGGCAACG CAGGTAATA TAATAACCA GCCTTCTTAT CTATTAGCAT
 14801 AAATGCACAT AAGTAAATG TAACATTA ATTNTAGTG TTTCCCTAGG
 14851 AAGGTGTTCA TTACCCATAA ATGAATCTAT TTATGGATA GGGAAAATTG
 14901 AAATCTTAAG GCTAAGTTA TCCAAGATCT AAATATATAG CTATGCTAG
 14951 TCTGAAAGCA TTTCTTTCA TTTATGATTC AATCCATGAA AATGGACGAA
 15001 ATATGTGGAT CATAAGAGTT TCTTGGCTT AAGAAATTAT TGTTTATAGA
 15051 AATAAGGGG AAAGCCCATT TGAGCAGTAA GCAGTCAGGA CTGTTTGCG
 15101 CAAGTGACAG AAACCCACT AACTGGATAG TTTTAACCTC AGGTATAGCC
 15151 AAATTCAAGG GCTTGATG TGTCATCAGG ACTGAGACAT GCCCTCTAGA
 15201 TTTTTATGCT TAGCTTTCT CTAACACTGGC TTACTCTCA GGCAAGATA
 15251 TGTCATATAT CAGATCCCAG CACTGGCAGC CTCACCTGC CCAGCTACAA
 15301 GTCCAGTGGAA AAGGAAACTT CTCTTTCTC ATCAGTTCCA CAAAAGTCCT
 15351 GGGCCTGATG TCATTGGATA AAACCTAGGA CACATGCTCA TTTCTGAATA
 15401 TGACACAGTG GCCAGGATAT TGTAGTCTTT TGCTTGACAT GGGCCTAGTG
 15451 AAATCATCAT TTTAGAGCT TGGGGTAGTG AGAAGAACCA AAAGATTCTG
 15501 GATTAAAGCC AGCCCACCA AACCATACGG ACATGGGGGA GGAATAATTG
 15551 CCTCAAAGGG AATCAGGATG CTATACCAA AAGAATGGAG ATTGAATGCT
 15601 TGAGAGGCAA AATAGATATA TATATATATT TTGTCATT AAGCATATAT
 15651 ATATATACAC TATCTATATA TAGATGTAAA TGTATTTATT GTCTATTTA
 15701 TGTTTATTGT GTAAATAAT ACATTACTC TCTCTATATA TATATTCTAT
 15751 CTATATATAG ATGCCCCCA TTGACACATCT TTTCAGAAAA GAAAATTCA
 15801 ACAGGCTGGA GCTGAACCA TGCAGACAAA AAGTCAACAT GCTAAAGTC
 15851 GAAGAGCCAC CAATGAGACA AGCACATACA AGGGATTCTG GTGGGTAAGT
 15901 CAAGATCAGA CTCAAGGACA GGCAAAAGGT CTGAAATTCA GGCTCTGAG
 15951 TTAATCAAAG CTGTAGGGGT CTTGGTAAT CCTTGTCCAG CCACGAGCAA
 16001 ACCTGTGTC ACAGAACAGT TAGAAAGTGC TAGCCATTCA CCCACATAGA
 16051 AGCGACTGGG AGGTGGTCTC TCCAGGCCAC TCTGATAATA AGTTGAGGTT
 16101 GTCGGCTGTA AAATGTTGG TGATCCTGAG GCACCAATAC TCTGTCCCAG
 16151 TGACCAAGGAC ATTTCTGCT CTACTAACAC ACTCAAGCTA TTGTCACAA
 16201 ACTCTTAAC AGTCCCAGTT GGAATCTTGG CTGCAAATCT GATGAGCCCA
 16251 CACCAACAGA TGGTAGGTT TCCTAATTGG TTCCATCCCC TCTAGTTTT
 16301 GGCAGGAACG AAACCTTCCC TATACTGAA GAGGGGACAG GGAGAGCCAG
 16351 GATCAAATGA AGGAGGCTTT AACCTCTGTT AAACAAGCG AGATCTCAAG
 16401 CTGGCTCTG TCCAAGGCAA ACAGGGCAGT ATGGTTCTTT TACATAGGTC
 16451 ATGGATTTCAGGGACTG TATCTTAAGA CTAACACTGA TGAGGCACAA
 16501 GACTGTAATG ATTGAAAGT GGTTAGCTA CAAAGGTCAA CTGATTTGGG
 16551 GGAAGGTGCA CTTGTTATT CAATAATTGA TATTGTTGGA GCATCGTGGT
 16601 AGATGAGATT ATTATTTGGC ATTATTTCT CTCTCCCTCA AACTCTTG
 16651 GAAAAAAATA TAACTTCTG CTTCATTAAT GTCACATTG GTCATTTGAC
 16701 ATGCTCTGGC AACTTAGATA TTAGTAGATA TGTTGAAAGC AGAGATTATG
 16751 AGAAGAACAT GCCCCAGAGA GCCTGCTCGT CTCATAGGAA AGGTAATAC
 16801 ACTAAGTGA AGTGTCCCAG TCAACCCACA GCCCACAGAC TAAAGTTGA
 16851 AGCAGAGCTA TCCCAGCTGA CCTGAAATC TGAGCATT GTAGGAAATG
 16901 CTCAATGTA TATACCACT AAATTGGAAA TGTTTGTGTT TGCAGCAATA
 16951 GCTGGCCAAT AGAAGCAAC AGCGTGTGTT CCACACTTGC TAGGCACCTG
 17001 AGGAAACATT GGAAATGACA GACATAGTCC TGTTCTCCAT GGAGCACTAT
 17051 TGTAGCTAGG AAGATAGACA ATGAATACAT TTACAAATAA AATATATATA
 17101 GAGAGATCAT TACTAGGGTC ATAAGAAAA TAGGATGTAG TGACATCACC
 17151 ACTATGGTAG AGAAGAACAC CTAAAAGTA AGTGGTCAAA GAAGGCATT
 17201 CAAAGGGAGT GACTTCTGAG CTCAGATATA AAAGTTGGAA GAGAGCCAAA
 17251 TGAGAGTAAA TTCCCCCTGTG GAATGTCGAA ATCCAGCCCC ATGGGCAACT
 17301 TGGATTGAGA ATCTTGGCT AGGCAGAGGA GAATGAGGTG CCTGGAAAAA
 17351 ATCTCCTGCA AACTAGGTCA CTCACCTGTC TTAGGGCAGA TACTAGCTTC
 17401 TCTCTACAC ATCACATGTG CAAGTCAAGG GCTGGCAGAT CACTTGCTGC
 17451 CAAGACTAGA TGGTCTCAGG CATTGGAAGC CACTGAGCAT AGCAAGGCAG
 17501 AGAGGGGGAG GTATGCTAGG GCATTCTAA CCATGAGGTG ATGGAATTGG
 17551 CTATACTCTC TGGCTTGCT CCAGAATACT CAAGACTTGT TGCTTATTAG
 17601 GATGGCAAGA AGGGGGTGTGT GTGTGTGTGT GTGTGTGTGT
 17651 GTGTGTTCAT ACATATATTC ATTCTTCAC AGAGGAGGAA AATGAACCTAG
 17701 ATGGCTTCTA GATCCCTTC CAAGTGTGTG ATTATAAAAAA GGATGCTGAG

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17751 ATTTAAATTA TGTGTGAAGG AAATGTTAAA TTGAAGAACT TCATCTTAGC
17801 TCTGTGCAA GCTCCATTG TTAATTGAGG TGGTTAATTA GAAAGGAGTC
17851 TCCCCTGAGC AAGCAGGATA AGCTCCAGCA TCCCTAATCT ATCTGGTAAA
17901 GGCTATAGAG GTGTACACC TACAAGGGAG AACAAAGAAC ATCTAATGCA
17951 AGCCCTCTGT TTAATCTCA CTCCAGACAC TGAAAAGCAA GAATGTTGGG
18001 GGACAGGAAG CTCACAGCGC CCGCATGGAA TTTAGACTCC AAGTAGTTA
18051 TTAGCTTTGG GAAAATTATT TAACCTACAC TGCACTTACT AGCTCTTCTT
18101 CCTTAUTCCA AGATCACTCT GAATACTTTA AAATATGGTT GGACATGGTG
18151 GCTCACACCT GTAATCCCAG CACTTGGGA GGCAAGGCG GGCAGATCAC
18201 TTGAGGCCAG GAGTCGAGA TCAGTCGGGC CAACATGGCA AAACCTGCC
18251 TCTACTAAA AATACAAAAA ATAGCTGGCA TGGTGGCACA CACCTGGAAT
18301 CTCAGCTACT TGGGAGGCTG AGGCACGAGA ATTACTTGAA TATGGGAGGT
18351 GGAGGTTGCA GTGAGCCAAG ATCAAGCCAC TGCACCTCCAG CCTGGGAGAA
18401 AGAGTGAAC TCCCTCTCAA AAAATAATAA TAATAAATAA ATAAAAGATG
18451 GTTTCTATGT TGATGTATG ACCAAGTAT TCTAGGGTTA TGGAAAGAATT
18501 TCTCATCAGC AAATCCAGCT ACTTATGTCT TTGTTTCTTG CAGCCTAGGG
18551 CTGATGGAAG TCTTCACACC CCTTCCAAGA ACCCCCACAA ACATTCCACC
18601 ACCCCCCACAT ACCCTGCAA GAATGAAGCT TTCTGGGCT ATGTTCTCCT
18651 CAACACCACC ACAGGGTCC TCTCTCACTC CTCTGCTCC TTTTTCTCA
18701 CTAGCGTCTA CCCTTCCCC AGGATCCAG CCTATACATT CTGAGTTCAA
18751 CATATCAAA CCAGAACATTG GCATCTTCC TGCCAAACTC ATTGCTCTT
18801 TCTCACTTTA TTTCGTTCA ATCATTCACTC CTAAAGATGT GGGTGTCTGG
18851 TTTCAACTTC TCCATATAAT CAATATTATG TGTTGATTTG ACCACCACTA
18901 TGACTCGAGT CTATCCCCAT TTCTCTTCTT TCCCACGTGGA TTATGGCTTT
18951 TGCCCTCTGA CTGTCATCTT CATGATATAA TCCACTTACA GGTGGCGGAT
19001 CAATTATG AAGACTATTT CTGATCATCA ACCTTCTTGT CTCAAAAAAA
19051 TATCAGTGGC TTCCCATCTT ATTTAAGTT CAAACTCAGA CTAAATATG
19101 AGTCTCTCAA TAATGGTCT CTGCTGCCT TCCTTTGAG ACTTACCTAA
19151 ACCCTACACT CTATGTCCTA GCCAACACTAG ACTACCTAGT GTTGCCACAA
19201 ACATGCCTCT CAGTCTTCA CTGCTTGGT CATACTACTG ATTCCATCTG
19251 AAATAGTCTC TACCACATTG AGCACCCACT CTCTACTAAA CCCTGGAGAT
19301 ACCGAGAAA ACAAAACCAG CAAACTCCCT GTACCCCTTGG GGTTTACGTC
19351 CTGGAAACA AATACATATA ATGATTCAA ATACTAGTTA AATGATAACAA
19401 ACATAGCCAA ATAGAGTCAT GGGACAGAGA GTGAGCTGTA GTGCTACATT
19451 AGATGGTGG TCAGGGAGGA CAGGCATCAC CTGAGAGAT GATATTTTAA
19501 CTGAGCTTG TTGAATCCA TAGAACTTT TCAGTGTGTT GGAGACATT
19551 TATATCTGTG CTGTCATAA TGTAGGCCT AGCAACATCT GCCCCTATT
19601 CACATTAGAA ATGTAATGAG CATGACTGAG GAACCAAATC TTTCATGTAA
19651 TTTAATTTT ATTAAATGTA ATTAAAAAG TCACATGTGG CTAGTGAETG
19701 TCAATTAGA CAGTGTAACT CTAGATTCTA GAATATTTCA GACAAGAAAA
19751 AAAAACAGT AAGCATAAAG GCTTTAAATG AGAGTGAAGTG TATATTCAA
19801 GAACAGAAAG AAGGCCAGTG GAGCTAAAGC ATGCTGAGGA AAGAGACAGG
19851 GTATTTGTA AGTCATGATA AGGAATTGAC ATGGAGTTA AATGCAATAA
19901 AATCACTAAT GGATTTAAG CTTGGGAGTG TAGTGTACTG ATTAAATT
19951 CAAAAGATTA CTGTCCTCC TCTGTGGAGG AAGGAGAAAGT GATAAATTGA
20001 CATGAAAACA GTATGTGCA GTCACTTTT GCTGCATAAC AAATAACATC
20051 AAAATCTCG TGGTTTATAA CAAAAGCTTT TTAAAAAAAC AATCACATCT
20101 GCAGGTTGCA GGCTGCAGTC TGTAGGTCAA CCATGATTCT GATTACACTG
20151 TAGGATAGGT TAGGCTAAAC TCCAGGAGGG TTCAAGGTCTG CCCGATGTGT
20201 CTTTGTGG GTATTGAGGG TCAAGGGGCA GCAGCTACAA AAAGACCTGC
20251 TCTCCTTTC CAGGAGCACA AGAGGCTAAG CTTTATCATG CAAATATATT
20301 TAAAGCTCT GCTCATGTCA TGTTCTCTAA TATTCCATTG GTTCAAGCAA
20351 GGATGTCAGC TAAACCTAAT GCTCATGGGG CAGAAAACAC ACTCTGTCTT
20401 CTAAAGGAA TTACAAGTC ATATGACAAA AGGCATAGAT GTGTAATT
20451 ATAACAATAT CCAATGTAAC ACAGAGGGGA CTGGGGAGGT TCCTACAATA
20501 GTCTGGATGA CAGATGGTGG TGGCTTGGAA AAGGTGTTAG TAGAAGAGAT
20551 GAAAGAGGTA AGATTCAAA AGTATTTGA AGAAAGTATG CACAGGATT
20601 AGTGAGAGAA TGAAAGTAAA GTATGGGTA AAGAAAACAG ACCATTTTC
20651 AAAGTCTTC TCAGATGCTA CCACAGCCCT GTGAAGCTGC TTCTCCCTCC
20701 CTCAAATTGCA GCTGATTCTC TTTTCTCTTA TCTCACTGGC TCTCTTTT
20751 GTCTGTCTT TATTGGCCCA TTTCAACTTT CTACCTCTG TTCTTGAGAG
20801 GTTTTATCTA TTGTTAAGAC TCTGAGGTT TGAGGGCAAG AGAATAAAAT
20851 TATTGTTATT TGCACCCAA CTGCTTAGGG AATAGGCTCA ATAAATATT
20901 CCAGGGCAAT ACAATGGTTA AGAGCAAGGA CTTGGAGAT ATCATCTCA
20951 TTTGGATCT TGTGTGATCT TTATAATTGA CTTAACCTCT CAAAGCCTTG
21001 GTTTTATTT ATAAAGTGGC AGTAATCATA CACTCCTTT ACAGTTGTGC
21051 AGATTGAAGG AGATCAACTT GGAAAGTGCT TAGCATAAGG CCTGGCATAG
21101 AGTAAGTACC CGATAAAATGA GAGCTATTAT TGTTGTTCA ATTAAATTG
21151 TTGTGATGAC AAGCTCTTT GGAAATGCC CTCAGAGTCT TCATCAGAAA
21201 ATTCAATGTT CTTGTTGAAA TGAGGGCAC AGAGAATAAA AACACTCTGG
21251 ATGGGATTCTT GTAATTAGT AAGGAGATCT CTAGATCTAA AGTCTCTTG

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21301 ATCTGAAAAT GACAGCAACA ACAAAACCCC AAAATAGAGC CACTTGCTA
 21351 CTTGTTTCTT TTTACCATCT GCCAAGATGG TTCTTTTAG TTCTCGAGGT
 21401 CTTGCTTGGG GTCAGCTGCC TTAAAATAAT AAAATAAAAT TTAAATCTGG
 21451 TCCTGCACTT ATTTGGGAGC GAGAAGACAA ACTGCTTTAA CTAAATATAT
 21501 AGCTAGTTGC TGCTGGAGTG AAATATAGGG CAATGTTGAC TAAAGTGT
 21551 GAGGAATGAA CTGCTCTGGG AAAGTGAATT TTAGGATAAA ACTGAGGATT
 21601 AATCAGAACC TGACTTTTTT TTTCGTAACA TTGTAATTG AGACAGTTTC
 21651 CGACATGTAC TTTTCAAGCT TTCTTGCCTT AGTGAGATGA CTTTGTGAT
 21701 CCTAGTTAA AGTTGCCTTG ATCATAAGTA TCTGTAAAT CCAGCGGGCA
 21751 TTGTGAACAG AGATTGCTG CGATGCCAGA TGAGAACAGA AAGGTTGGGG
 21801 GTGAAAATCGC TGAAAAAGAG TGCGATGAAAG AGGTGAAAAG TTAACATGAT
 21851 GAGTTGGAT ATCTGAGGAG GCGTTCTCC GGAGCTCTGC AAGATACATT
 21901 TGGAAAAATAA GGCTGGGTT AGACTAGAGA AGGCTTGAA GGTCAGGAAT
 21951 AAGTATTGAGA GAGCACAAAT AATATGTTA AGTTGCATTG TTGATATTCC
 22001 AAAGGTCTG TTATATAAGCA AATAAAGGGAT GATTTTATTG AGCAAGTACT
 22051 AGAATAATCC TCAGCAAACA TAAAGTTACC TGACATCAA TGATGCAGAA
 22101 TATCCACATT TCTACACAAAT GAACTCTACA GGTTTCATT TTAAAGTGT
 22151 TTAGGAGCTC ATTTAGTCAG TGCTTCCCCT TAGAACTGTG ATGTTCTGAG
 22201 GATATTAATA GGTTATTGAGG GGAGCATTGG GGTTGATGAG GGAAGGTTGC
 22251 ATGGTTAAAT ATTTAGTCAT GCTGATTAAG CAAAGTATAA GGGGTGCTGT
 22301 GTTTAGGAT TTGAGAACCC CTTTAAATG CTATGTGTC TTGTTAATT
 22351 CTAAAAAGA GGATACAGTA TGTTTTTCC AACTTAGTC CCTCTGTAGC
 22401 CCACAGAACCA GCGGGCTG ATTGCTTGGT GAGTGACAGA TCAATGACCA
 22451 CAACCAAGGA GTATTTAAA AAGGGATTTT ATTACTTGCA ACAAGTAAGG
 22501 ATGGCTGACA CTGACATAG TTCCAAAGC AGTGCCTCCC CAAATAAAGG
 22551 TGAACCCAGG GCTTTATTG ACCTGGTGG CTGAATCATT GTATGTAGAG
 22601 GTGAAAGTAA GGCAGTGCAG GTGCAGGTGC AGTCACAGAT CATGCTTTA
 22651 TACTTGCGC ATGTATAGGA AATGTTGAAT AAGCTCATCT CTGGATGGGG
 22701 ATTTTAGTAC GTTAATAAAG GGACTTCACC AAAGTTCATC TCCAACCTAG
 22751 GCATCTCAAC CAGTTTTGT TTGTTGGCT TCTTCCTGGG ATTTTTTTG
 22801 AAACAAGAAC TCAAGGTGCA ACAGTTACAA GTGTGTAATT TCTCATTGT
 22851 TGTACCCAC AATCTGGGA CCCTGAGTTA TAACTCTTT TGCTGAATT
 22901 GTGAAATAATG TCTTGTGATG TTATATCCTG TTGTTACATAT GGTGAAACTA
 22951 AGGCTGAGAG CATACACAGG GATTATCTG CAGTCAGGTA GCAGCCAGGT
 23001 CACGATGCTA ACACAGAACT TTGACCGTC ACCCAAGGCC TCCTACTCTT
 23051 CCAGGCTCCC TGTCAATT TTGAGGCCAGT CCTCTAAACA GTTTTACCCA
 23101 GAACAAGGAA TTGCGGTGA TTTCAGAAAG AACTGGCAGA CTCGGGGAG
 23151 GCACTTGCCA AATTGGCTCA GGCTGGCCTT GCTGCCATGC TTCTTTCTC
 23201 CGTTCTGCA AAGCCAGTTC TAGTAACCT ACCTGCAGAT GTCTACCCCTG
 23251 AAATAACACC CAGCCTCTGT TACACTGCTG TTACACACAA ACAAAACAAAG
 23301 CAAATCTGCT GCAGGAAAG GCAGGTTGAA ATAAATTATT TTTAGTGCAA
 23351 CATATAACGT CAATGTCAAA AATACGAAAG AGGCAGGTTG CATAGGGAGG
 23401 CTGAGGAGGA GATGCTGAGA TTCAAGTGTGG AAGGTGACAA GATAAGAGGA
 23451 GGAAAGTTG CCCTGGCCCT GAGGCAGCAA AATTAATTG GCCCCAGGCC
 23501 TTAAACTGAG GGAACCAAAT CTATTTATTA CAGAAATTAT AAAGAGATT
 23551 GGTGACTGAC CCCACTTAC CTTGAGTGAT TGACTTTAC ACGCAGGTAA
 23601 TAGGAAATAAT AGTGTCTAT TTATAGAGCA TCTTCAGGTG GTTGAGGATA
 23651 TGGAAAGCCT TTCCAGTAAG GAATGGTTGG AGGCTCTGAG AAGGAAAAAC
 23701 TTAGGCTTGG ATTTCATCAT CAAACTTCTA AACAAACATA TTGGAAAGG
 23751 TACTGCATT TCTATGGCCC AACAGGCCAA AACACAGACA AAGTGAGTAC
 23801 AACATTTGGT CTGGCAGATT TTGACTCCAC ACGACAGAGC CCATTCTAAG
 23851 TGTGTGGACT GGCTAGCAGT GGCAGGGTT CCCTTCTCT AGTCTGCAA
 23901 CCTCCCAATC AACATGCCGT TTAGAAACCT GTCTCTTTG CAGAATTGCT
 23951 TTACCACTTC TACCTGTGAT ACCCAGTGCC TGTGATACCA CCGTTAGAAA
 24001 GTCATCTAAT TCGTTTAACTTCTCC CCAAGCATCCG TTGAATAGCA
 24051 AAAGACAATC CTTCTGACCA TACTCTAAT TCTGTGGGCT GGCACATATGG
 24101 ATTTAATTGT GCCCTCCCAA AATCCGTTTG TTAAGGCCT AACCTCCAGC
 24151 ATGATGGTAG TGGTTTAGC TGTGTCATG AGGATGTCT CATCATTATG
 24201 GATTAATACT CTATAAGAGA CACCGAAATA CTGCTCTT CTCTTTCTC
 24251 GTGCACATGC ACCAAAGTAA GTCATGAGA ACACACAGCA AGATGGCGGC
 24301 CATTGGCAAG TCCAGGAGAG AACCTCACCA TAGTGGCACC ATGATCTCCG
 24351 ACTTCCAGGT TCCAGAACGT TGAAAAAAAGA AATTTTGTT GTTTAAGTCA
 24401 CCATTCCATA GTATTGGTT ATGCCATCCT GAGCTGACTA ACACCACTGG
 24451 TAATTAAGGT GTTCTTCCA TGAAAATGA AATGATGGTC AATAGGAAGC
 24501 AAACAGAAC TTAAGCAGAA GGGCAGAAAG GAGTGCATTG GGGAAACAGA
 24551 GGGAGTCCCTA TAGAGACTAG ACCTGGGATT TTGACAGTTC TGCTGAGGGC
 24601 TGGCCCTGTG CCCAGCTCC TTCCACTTCT CTTCATCTCA CTAGACCAAG
 24651 AAAATATGCA CATTGTTAT CCACAAATAC TCTGAATTCC CCCGCCAACG
 24701 CAGATCCCCG GGAAAACCTA ACACAAGCAG AACAGTGGAG GAGATGCACG
 24751 GGGTATTGG TGTTCTCAG GAAAAGGCT TGATTTTTG ACACCCCTA
 24801 TCTTGGTCTC TTAATTGTC CTGAGTCAGT GAGCCACAGT GAAGTCCAGA

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24851 GAAAAAAATG GAAATAGGAG AATCGGGCTT AAACCTCAGT TTTGTCGCTG
 24901 ATTAACCTGT GATCTGGC AACCACACTGA TCTGTTCTT GTTTCAGTT
 24951 CCCTCCATGA CCCTGAGTAC TTTAATAGCC TCTATTCTCC CATGTATCTC
 25001 TGTTGAACAG ATCATAAAGA CTAGTGATTA TGAATCCAGA CTTTACTGTT
 25051 ACTGTCAAAT ATCACATTAA TTTCTCTCAGC CACTTTACAC CTGTCACCC
 25101 TGAGGAAAA TTTGTAAATA TCTCTGTTTC AGTTTTATA GCTGTCAAAT
 25151 GGGGTTAATA ACAATCCCTA TCACAAGCAG TCTTTACAGG CATGGAATGA
 25201 AAAATTGCTT GTGAAATGCT GAGTGTAAGG CCTATTATAT TCAGTAACPA
 25251 TTACCTCTAT TTTGGTCAA CACCATTTCAGTCTCCCC CAAACACCC
 25301 GCTGCAACAC ACCTCTAACG CTTGGCTATG CTGGCCTAAA AAACCTCTAG
 25351 ACACCCCTGA TGACCCAAAT GAAAATCTTC TGAAACCCAAAG GAATGCTTTC
 25401 CTGCGTGTG AGGTGGCAAG CATCACACCTC TCAAGGGAGT AAAACTCTGC
 25451 CTTCTGCAA CCATTATTCGC CCATAACCCA TCATGTTGTG ATGCGTTTT
 25501 TACAAGATGTT TCTTTGTTG TCTATGCTTT TGGGGTTATA TGCAAGAAAT
 25551 CATTATCCAG ACCAATGTCA CATGGTTTT CCCCTATGTT TTTCTCCAGT
 25601 CGTTTACAA TTTCAGGACT TACATTTAAG TATTAAATTC ATTGAGTT
 25651 GATTCTGTG TAAGGGATGA GAAAACGGTC CAATTCAATT CTTCTGCATG
 25701 TGAATAGCCTA GCTTTTCCGG CACCATTTAT TGAAGAGACT ATCCCTTTCC
 25751 CCTTGTGTC TCTTGGCACC TTTGTAGAAA ATCAGTTGAT CATAGACTTG
 25801 TAGGTTTATT TCTCAGCTGT CTATCTTATT CCATTGGTCT ACATATCTGC
 25851 TTTTATGCTA GTACCATGCT GTTTGATTA GTATAGCTTT GCAATATATT
 25901 TTGAAATCAG ATCATGTGAT GCCTGCAGCT TTGTTTTTCG TTAAAATTGC
 25951 TTTGGCTGTT TGGGATTTT TTGAGTTCC ATACAAATT TGGGATTTT
 26001 TTCTATTCT GTGAAGAATG ATGTTGGAAT TTTGACAGAG ATTGCATTAA
 26051 ACAAGAAAAT TAATAACCCCT ATTAAAATG GGCAAAAGAC TTGAATGGAC
 26101 ATTCCCTCAA AGAAAGCATA CAATAATGGA CAACAGATAT ATAAAAAAAT
 26151 GTTCCACATC ATTAATCATC AGGAAAATGC AAATTAAAAC CACAGCATAA
 26201 TATCACCTCA GACCTCTTAG AATGGTATTA TCAAAAAGAT GAAAAAAAGC
 26251 AAATGCTGGT AAGGATGTGA AAAGAAAAGG AAACCCCTGT ATACTGTTG
 26301 AAATCATGTA AATTATTGCC CTCAGTTAC AAAACAATAT GAAGGTTTCT
 26351 CAAAAAAATTA AAAGCAGAAT TATCATGATT CAACCAATTG AATCATGGTA
 26401 AACATCTAAA GTTCTGGGTA TATATCTAAA GAAATTGAAA TAAATATGTC
 26451 AAAGAAAATAT CTGCACACTC ATGTCATG CAGCATTATT TACAATAGTT
 26501 AAGATATGGA ACAACCTAA ATGCCCATCA ACAGATGCTA GGATAAAAAA
 26551 ATGTGTTTGT GCTACATAAT GAAAATAC TGAAGACTTTA AAAAGAGAAG
 26601 AAAATTCTGT TATCTGTGAC AACATGAATA TAACTAGAGG ACATCATGCT
 26651 AAGTTAAATA ATCCAACCAC AGAATGACAA ATATTGCATG ATCTCATTCA
 26701 TATGTGAAAT CTAAAAGCAT CAAACCTCGTA GAAGTAAAGA GTAGAATGGT
 26751 GGTGCGAGAG GCTGGGACT TGGGGCATAT GTTGGTCAAAG GGGCACAAGG
 26801 TTTCAGTTAG ACAGAAGGAA TAAGTTCTGG TGAGATATTG CACAACAAAG
 26851 TGACTGTAGT TAATAATATA TTATGTATT CAAAATTCTC AAAAGACTGG
 26901 ATTTAAATG TTCTCACCAC AAAGAAAATGA CAAGTATGATG AGGTTATGAA
 26951 TACGTTAAATT AGCCTGATTT GTTCATGCCA CAATGTATAT GTCTATCAA
 27001 AGATCACACT GTAACACAGA AATAGATATT ATTGTCAAT TAAAAACAAA
 27051 TTTTTAAAAA AGGCTATTCTT TCTTGCTGAA TCCCACATGT CTCTGGGCT
 27101 AGGGTAGATG TCTTTTTAA CCAGATTGTG TCCAGCTTAG TCCGGTGTTC
 27151 AATAAGCATT AAGTGTCTGA AGGGTGGTCA ATGGACAAAC AGATGAAGGG
 27201 TTGCATAGAT TAATAGAAGT CTACCATATC TAGGCTGGGA GTGGTGGCTC
 27251 ACACCTGTAACCCAGCACT TTGGGAGGCC AAGGTGGCG GATCATGAGG
 27301 TCAGGAGATT GAGACCATCC TGGCTAACAC GGTGAAACCC TGTCTCTACT
 27351 AAAAATACAA AAAATCAGCC TGACGTGGTG GCGGGCGCCT GTAATCCCAG
 27401 CTGTCAGAA GGCTAAGGCA GGAGAACATC TTGAACCTGG GAGGCAGAGA
 27451 TTTCAGTGAAC CCAAGATCAC ACCACTGCAC TCCAGCCTGG GCAACCGAGT
 27501 GAGACTCTGT CTCAAAAAAA TAAAATAAG AAATCTACCA TATCTACTTC
 27551 TCAGGCACTAA ATATGATAAC TATTCTCTT AATTCTCCAT TGGATAAATA
 27601 ACTGTTTATA AACATCTAGT TGCCAGACCC ATGCTTGGAG TCTCAGGGCT
 27651 AAAAGAAAATG CTCCCCATTG GCTCTATGTC CTAGTCACAT CAATCCCAC
 27701 TGATCCCCAC AGCACCCCTT GGGGAAAGA GAGTAGTTGA TAATCTGATT
 27751 TTACCAATGA ACAAAAGCTC AGAAAAGACT AGTTGATCCT AAAAACACCA
 27801 CACAGCATTC TAATGTGTA AAAATACCTG GATTTGAGTC CCCTGTACAC
 27851 TGATGCCCTG TGTTGGCAGA TTGGCTCAGA TGCTTCCCTC CTCTGGGATG
 27901 TGGACTGGCC TCTGAGGTCT CTTAACCTC TGGAATCATG TGAGCTGGAG
 27951 CACCTGTTGG CTGGGGAGAC AAAAGGCTC TGCGTCCAGA TCTCCCTCA
 28001 CGAGGAAGAA ATGTGCTGAC ACTTTCTATA TCAAACCACT TGGGAGCAT
 28051 GGGGGCGTAT TGTGATGAGG CTGATGGATC CTCCCTGAAC TGGTGCCTCA
 28101 GCCTTCCCAT GCCAACTGAG GGAAGGAAA GAAAAAAAGG AAAACACAAA
 28151 ATCAAACACG AAAACTGAGC TTGATCTAGA GCTGAAGAAA AATATTCTAC
 28201 TGATGGCAAC ATTCTGAGGCT GTATTATGAA GAAAACAAA TTCATAAAAA
 28251 CCTCAGCTTG GCCTTAATGG TTGGATCTTA AGATGAGTGA CAAATGACGA
 28301 AATATTGGGT ATGAGAGAGA GGCAGGAGGT GGGAGGAGAG CAGGCCCTGC
 28351 AATCAGAACACTTACCTTAAACATCCATT CACGAATACA TTGCCCTCAG

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28401 CCACGCAGGA AACCCACACA GGCCTAGAGG ATGCTCTGT CTTTTTCGT
 28451 GGTCTGCCA TTCCCACAG TACCCAGAGG CCCGAACCAG CGAGGAGAAA
 28501 ACATTCACTC TTTCTCTGAA TATTCAATTG AACTTGTGGT CAGTTCTG
 28551 ACAGCATCCA GATCCCCAGA GTGCCTGCAT GGCTTTATT TTTCATCCAC
 28601 CGCCTGCTGA CTGGTCCCTC TCTTAATACC CCTCCTCCCC CAGGGCTTGC
 28651 TTCTCCCTGT TTTGTGGGA GCAGAACATT TGAGCTTCCA GGGGTAGTAA
 28701 CCACTAGTGC TGGTAGCAG AGCTTGAA ATCAGGGAG GGACCCCAA
 28751 AGAACCATGG AAAGTCCCCT GGGCCCTCAG AAAGGGAGGG ATCAAATTA
 28801 GTAAGGGAAA CAGACATGAG ATATGGCAG ATGGGAAGCT AAGTAGCTGT
 28851 GGCAGCTCCT TATAAAGAGA TCACAGCTGG AGATGCGTTC ACTAATCCCA
 28901 CAGAATAATC CTCTGTTCT CTTTCCGTAA CCCCACATC TAGTTCATCA
 28951 GCAAGTCTGT CAGTGCTAGT TACAAAAAT ATTGTGAATC CACACACTT
 29001 TTTCAAAAAA AATCTTACCA ATAACCCCGT ATCCCTCACA CTGTGATCTT
 29051 TTTCCCATAT CACTACATTA ACCTCCTAAC CTGTCCTTCC GCCTCCCTCC
 29101 AGACAATGTT CCACCTGGAG GCTAAAGTGA CTTTTAAAC CTATTGAGCT
 29151 GAACATTCCA TTCCCTCGCT TAAGTAAATG TAGACTCCCT TCCTTGGCCT
 29201 ACAAGGCCCT CCATGAACCT GTCCCTCCCT AACCTTACCT CTTGCCCTC
 29251 TCTCATGTA CTGGATTTC GCCTTCCAGG CCTTCCCTCA GTTCCTTAAA
 29301 CAGGCAAGC TGCCAGGGCC TTTGCACTGG CTGTTCCCTT TGCCTGGAT
 29351 GCCGTTAAAT CTCATCATGG CTGGCTCTAG TTCACTATTG AGGTCCAAT
 29401 TCCACGTTA CTTCTCTAGA GAGTGTCCC TGAAACACTTA ATCTAAAGTA
 29451 AATTCTAAT TCCCCTCTCT TCCAGCACTT CAACATCCTT CAAAGCATT
 29501 TTTTTAAATA GCCCACAGGT GCTACTAAAC TTGAGCTT TTTTTTATA
 29551 ATTAGTACCC ATTTGCTCTA CTTACTTGTA TTATCTGATG TCTTTTTTA
 29601 CCTGCTCAGT GTAAGCGCCA CAAGAAAAGG ATCTGCTTCT TGTTCCCTGT
 29651 ATCTGTGTC TAGTGTGGG TTAGCACAGA CTAAAGTGCCT AGTAGACATT
 29701 TATCAAGTAA CCACATAAAAT GAATGAATT CTGAAGTGGC TATTCTTTC
 29751 TACCTGGATT TGAGCTCAGC CCTGGGGATA CAGACATGAA AAATACACAG
 29801 CCAACTACTC GAAGCTGCTC ATGGCCTAAT GAGGGAAACT GAGAAGTCAG
 29851 TAGTTTCAGG ATTAAAAGCC AGTAGTTCA GGATTAAAAG TATGATAATG
 29901 TATATTATTA ATCATGTGTA TACATGTACA ATAATAGTAA TAGTGGCAA
 29951 ACTTGAGCCA TTATGTGCTC AGCACTGTAC AAATATTATG CAAGTATT
 30001 TTTCATATA ATTGCCACAA TAAACTTATG AGTTAGTATT ATCACATT
 30051 AACTACATAA AAATGCATTG GGCAAGATGCA GAAATGGAGA TACTCGGAGG
 30101 TTCAAAATAC GGCGCCATGG GGACAGTTAG TAAGTGGCTG AGTGAATTCA
 30151 GCCTGGCATC GTGCTCCATG TCAGAGCCAG TGCTCTGAAG CACTAGATCA
 30201 GTGATTCTCA AAAGATGACC GTCCCTGGACT GGTAGAGTCA GCATCACATG
 30251 GCAGCCTGTT AGAAATGCCA GTTCAAGGCC AGGCACGGTG GCTTACGCCT
 30301 GTAATCCCG CACTTTGGG GGCGCAGGTG GGCAAGATCAC AAGTCAGGA
 30351 GATCGAGACC ATCCTGGCTA ACACCGTAA ACCCGTCTC TACAAAAAAT
 30401 ACAAAAAAAT AGCCGGCAT GATGGCACGC ACCTGTAGTC CAGCTCTCA
 30451 GGAGGCTGAG GGAGGAGAAT CGCTGGAATC GGGAGGTGGC AGCTGCAGTG
 30501 AGCCAAGATC ACGCCACTGC ACTCAGCCT GGACGACAGA GCGAGACTCC
 30551 ATCTAAAAAA AAAAGGAAAG AAAAGAAATG CCAATTGAGG GGTCTCAGGC
 30601 CGGACCTCCT GAATCAGAAA CTTGGAGTT GGGGCTCAGC ACTCTGTTT
 30651 AACAGGCCCT GCAGATGATT CTGAAGATGC TCACCAAAGT TTGACAACCA
 30701 CTACCTATTG AATGCTTAA TTTTATGGG TACTAGATCA GACTAGATCA
 30751 GAGTCTGAAG TTTTCTGTA ACTCAGTTCT CATCTTAACG CTGTGAGTGT
 30801 AGATTGCTCT CAATCCACGG CTGAAGAACAG CAGATTGTA CTGAATAAAG
 30851 CCAGTTACCC TGCCTGACCC TGGCTCCAGG ACCTGCAGCA TGAAAACAT
 30901 CATCCAGGAG TGCAGCCCT GTGAAGACAG CTGACCTGAA GGGCATGGAG
 30951 TCTGTGACCC CATCCACCTT GAGAAGCATG CTTCACCCAG CAAAGGAAAG
 31001 ACAGTCCTAG ACAAGGAAAC ATCATCAAGT CTCTCTGTAG GAATACTTCA
 31051 TATCAGACCA TATTGCGATG TGTTGAAGAT TATTATATAA TGATAATAAT
 31101 TAGTACAATA GTAATACCAT ACATTTGAT TACATTTTG ACATTTCAA
 31151 GGCTATTTA TATTCTAATA ATCTATTTTC CCTCTTGATA ATTTTATTTT
 31201 CTCCCTTAA AATCTCTCCA GTTACACAAA GTAGAGTAGG AGTAAAGGAA
 31251 TTGTTAATCT GTTAATCTGC CTGTCAGGG GAGAGGCAA GTAAAGAGAT
 31301 GTATCTGTGA TTTCATGGCC TGTTAGTTC GTAGTAACAA TAGCTAATGT
 31351 CTGTTAGGGA GCTTAAGTGG GCCAGGCTCT TTGCTAGATA TGTCAGTGC
 31401 TATTAATTAA ATAAAACCTC TAGATCCAAG GCTTCCAGAC TCCCAACTGG
 31451 TCTCCTTCAG CAAGCAGCGT TTCTTTCTT TCACCTCACT CTGAATTCTT
 31501 CAGACTCTC AGTCATTAT TTATTTTATT CATTCAACTT TTATTAGCT
 31551 TATACATCCT ACAGAGAAGG TGAAGGGCAC AGAGGTGAAT GTGCTGGCCC
 31601 ACAAAATTGCT AGCTCTCTCA GGGGAATCCA GAAACAATGCA GTGCCACCC
 31651 CAGTGGAGCC TTGAAGGACA AAGGCAAATT ATTACCAAA TCAAAAGTTG
 31701 CCAGATTCAA GATTCTCTGC AGTTCTTGTG GGTGAGCT TGGTGCATAA
 31751 GAAGAAAGGG GGATTTGTGTT CTAATGAAAG ACAGGACACA AGGGCCTACC
 31801 TACAAAAATT GCTGCAATAA ATGAGGACAT CATTAAATT GTCTTTGTGG
 31851 GGGCCCATGG ATATGAAAGT GAGTAGGGAA GATGTATACA AGCAATGGAA
 31901 GGAATAAAAG ACAGAAGACT TCCTAGATCT AGTGTAGAG GCTCCATAGT

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31951 TCTGTTCCCTT ACAAAATGCTG TAACCTTGGG CCAGCCTCCC AACCTATTCA
32001 ACCTTCTGCT TCCTTCTCCA TGAAATAAGA ACCTGGATT CTTACTCACC
32051 TGATTCACAG GGAACCTCTG AAAATCAAAC GTAAGAATTAA GTAATAGTAA
32101 TAATAACAAAT ATAAATAAGCT AACATCTATT GAGCAATTAT ATTTCCTTACT
32151 TTCACTGGCT TATTTCATTT AATCATGAAA GCATTTCCAT GAAGCAGATA
32201 ATGTTTTAGG CCCAGTTA TAGATTATAA AAACAGAGGT TTAGTAAATT
32251 ACTAAGTTCACA CCCACCCCTA ACAAGCAGTG GAAACAGGAT TTGAAATTCA
32301 ATCTGTCTGA TCTTTGAACC TATTACTATT AAATCACTAC CCCAGAATTC
32351 AAAAACAAAT GAGGAAAAGT CTGCGAGTCA TGCTGATGAA ATGAGCGGAA
32401 TCAAAAGAGG GAACAAAAGT GAGGGCTGG GGTAGAGGC TGTTAGCTTG
32451 GCATGAAGGA TGGAAGCAT TTCCAGATAC CATGTCTGA GTGAGCACAA
32501 TGCTTAGGCT ATGCAGCAGA CCCTGGACAG TGAGCCAAGG TTAAAGAGTC
32551 AGTGTGAACT TTCAAGGAGA AGAGTTTATG CAGAGTAACA CATGCCATAA
32601 ACAGAAGAAA GTATCAGGGG CCAGAGAAAC AGAGTAAGAG GCAGAGCTGG
32651 AGTCAGGAG CTGCAGATTCA CAATGCCCTC TGACTTTCTG CTGTAGCTGC
32701 AAAGGTACAT TTTATTTAAC TCCATGCCCA GCCCTGTGGC AGTCTGGAG
32751 CCCTTGACAA GAACTACAGC TTCCACATCT GGTCAGTGG GGAAGGGAGAA
32801 ATAGATCTC CCGGGCAAAA AGAACGAGCT CAGTCCTGCT GCCTTCCCTT
32851 GAGTCTGGAC AGAACCATCC TCGGTGGTGA GCTTCCCAGA GCCTTTGGG
32901 AGTGGCTCAG GGGACCAATT TGCTTCTTG AAGAATTTTG AATAGCTTCA
32951 GATGTAGCTC TGGTGGTGA AGCTAACGAC AATAATGAAA ATAATATGAT
33001 AGCTGACATT CATTGAACTC TAATCAGGGG CTTGTTTAA GGCATATTTT
33051 AGGCTCTATG CACTGTTGTG TGTCTGCTG CTCTCATTAC ACCAAAGATA
33101 TTATAGCACA CCCACATCTC ACATTGAATC TGATTTATGT GTGAGTTGAG
33151 TGGCATTGCT GCACACTAGT TGGTGAATG ACATGTTTA TAGATATTAA
33201 AATATTTATT AATTTGATT TACAGTTGC TTTAATATT TCAGAGTCAA
33251 TATATTTATT TTTCTGTC GACATACTT TTAGGCCCCAC CCTTCAAAAG
33301 ACTGTTAGGAC CCAGACACTG AGTTTCTCA TGCCACCTGG AGAAAGTGAT
33351 CCTGTAATTAA TTGTGTTGGG AGCTGAGTGC TCCACACAT TGCTGTGGA
33401 TAAGTGTAAAG ACTCTGGAAT TAAACTGCCT TAGGTTGAA TCCTGAACCC
33451 ACTACTTTCT AGCTGTGAA TCTTGGCAA GTGCCATATC CTATTTGTGC
33501 CTCAGTTTTC TCATTTGCAA GATGGTTATT GTAAGGACTG AATCAGAGAA
33551 CACATAAACAA GTTTAAATAA CTACCTGTAAC CCTGTATCAT GGCATGTAAA
33601 GTTGTATTAA TTGATATTAA AAATGCCCCA GTGAGGTAGC CACTATAGTT
33651 ATCCCCATTG TGAAATGAA GTCAATTGTA TGATGGTGG AGAGGGACAT
33701 TGAACTCAGG TGGTCTGACC GTAGACCTCA TATTCTATAAT GAGTAAGAGT
33751 TTGTATCAGT CAAGTTAGGC CAGGTATACACAGTAACA AATGACCCCC
33801 AAACCTCCAT GGGCTAATAT AACATGAGTT TATTCTTGG TCATGCTGCA
33851 AGTCCAACAC AAAATGGTGG GGGAGTGGGG AGAGGCATTG CTCCCTCATGC
33901 TTCCCTAGGG ACCCAACGT AAAGAGGGAC CATCTAACAA TGATCACAGT
33951 GTCAAAGGAA CTTATGTAAT AAGCCACACC CTGGCTCTAA AGCCTTATTC
34001 CCAAGGTCAAC CGACATCAT TCCACACACA GTTCATTGGG TCAAGCAAGT
34051 TGATGGCCAG GCTTAACATT AAAGGAGGTAA GAAAAGTGGAA ATCTTACCAT
34101 GTAACGTCAA AATTGGGAAT AGCCAAATGT TATCTCAGAG GAAGGTTTG
34151 AGGATCAAAT TAATTAAATCT ATGAAATTAT CAAAAATAGG GCCTAGAACAA
34201 TAGAAAAAATC TTCTTTAAAT TTAGGTATGA ATTCTTATTA ATTAATGAAT
34251 TGCCTCTTGT AGCAGCTCTC CTGTTATAAT ATCTTCCACC TGATTCTCTT
34301 GTTCTGTATACTCCTCTC TCTCTCTCTC TCAATGATCC
34351 ATCTGCAGA CCTGATCATTTA TTATTTATTA GACCTCTCTC TTATCATGTC
34401 ATCTCTCTTG TTCTCCCTTG TCTGATTGGG TAAGTTCAGA GTCTTAAGCA
34451 AGATATCTGA GGGCAATCCG TAATTCACTT CTAACCTACT CTGGAATTTT
34501 TTCTCCCACT TTTCTCTAAAG GCTGTGTTCT AACTGGAGG ACTCATTAC
34551 TGTTCCCAAAT TTAGACTGGC ACATTCTAC CCCATCCCTT GATATTCTTC
34601 ATTCTTATTC TATAATCTCC CTTCTCAAAT GCCTCTTGCC TTCTGCAAT
34651 TTATATATCCC TCATTATGCA GTTACCTACT TCCCTCCAAGA AGCCTCATT
34701 TTCAACACAG CCTGAAATGA TTTCATTAG GGTGAAACTT CCACAGTACT
34751 ACTCATTGGCTGCTGAACTTTA CTACTCATTT GACCCCTGAAAC TCAGACTGCT
34801 TTGAACATT TTTTTTTAT TTATGCTTAT GTGTTACTG TTGTGGAAAG
34851 AACACAGAGC ACAGCATCAG ACTCATATTG ATCTAAATT CAGGTCTGTC
34901 ATTGACTGGC CTTGACACCC TGTGAGGTC AGCCATGTT TCGAGCTCC
34951 TGCGAGGATA AAAGTGGATA TACCTATTTC ATAAGAATGC
35001 TGCGAGGATA GAATTGAAAA CAAGTTATAG TGACCTACAT ATAGGGAGATG
35051 ACTGTCCTCA TCATAGCTG GTCCCTAGTA TCAAGAACAG TACCTGGCAA
35101 ATAATAGTCA GCTCAATGAC TATTGTTGA CTGAATGAAT TATTAGTAAT
35151 CACCAGCCAC TCTTACTGCA TGCTAGTTT CTCCAAAAGC TGTAAGTCC
35201 TTGAAGACAG CTTTGAAAG TAAAGTCTT TGAGTCTTA GGCAACGGTT
35251 CTCAAGCTTA ATTATACAGG AGAACAGAAGG AATGTTATTG AAATGCTAGT
35301 AGTTGGAATC TGGATGTACT GAATCAGAAAT TCCCTGGCACA GGGCCAGGGC
35351 CAGTGGCTCA CGCCTGTAAT CCCAGCACTT TGGGACGCTG AGGCAGGGCAG
35401 ATCACAAGGT CAAGACATAG AGATCAGCCT GACCAACATG GTGAAATCCC
35451 TGTCTCCACT AAAAATACAA AAATTAGCTG GGCCTGGTGG GGCTCACCTG

35501 TAGTCCCAGC TACTCAGGAG GCTGAGGCAG GAGAATTGCT TGAACCTGG
 35551 AGGCGGAGGT TGCAGTGAGC CAAGGTCAAG CCACGTCACT CCAGCCTGG
 35601 AACAGAGTGA GACTCAGTTT AAAAAAACAA AAAGAATTCT TGGCACAGAG
 35651 TCTAAACATC TGTATGATAA CAAACTCCC AAATGATAGA GTCTGAAGAT
 35701 TATGCTTGAA GAAATCTTAT TTTGGAAGAG CTCTCTTGA CTGGATACAA
 35751 ATCTTTCTTCTT GGTAGGGCTT TGTAAGACAA CTCATCTATA AGGATACATA
 35801 AACTTCTAT CTTCTGGAC TAGCTTCTT GCATAGCTAA CTCATTTAAT
 35851 TCCAGGCTAG ATCACTCTA AAAAATCAAT GCATTAGAAT TGAATTAATT
 35901 TGTGTTCACT TAATTGATAT AGTGTGTGCT TTTCTAAATG GCACTAGGTT
 35951 TGAAAAGTGA GCTGGTCACA CTTTTTACA GTAGGCTTCT CTAATAACAC
 36001 TTGATTCTGT CTTTGTACCC AGTGTCTTCT GTATAGTATT AGCTCAGGG
 36051 TTTGCTACGTG TTGCGAACAA AACTTTGTT GATGCATTGA AAAATACAGT
 36101 TTCTCTAATTG CAACTCCAGT GAACCTGTAA TATAGTAAGA TCCTACAGGT
 36151 CTCTGTAGGA AATATTGCTA CTGAAAGTCA AAGATCACTC ATTAAGTCCA
 36201 TCTCATAGTT GATTGTAGTC CAGTGGAAAT ATTGCTATA TTTGGCAGAA
 36251 CTGCTTTGT ATAATAGTGA AACAGATACA TTCCATCTTA GCACTGCCAG
 36301 CTTAGGATCT CTTAAGGATT CGACTATTAA CTAACTGAG GTACAGGCCA
 36351 TGGGACACAC ATCACCTATT GAATTCCAGG TCTTAGCAGT TTATTAGAAG
 36401 TGATAACAAAT GCTTCCATCTT AAAAAAGTCA ACTCATCCAA TTGTTAAGAC
 36451 GATTATCTT TTTCCTTCA TTTCAGCCTA GTGCAGTGTAT TCTCAGCTGG
 36501 GAGTGATTTC GCCCCCTTCC CTTCTGGGG GACATGTGGC ATATGCTCGA
 36551 GACACTTTTA AGTGTCAAA CTCAGGACTG GAGAACTACT ATTGACATT
 36601 AGGTAAAAGC AATGGATGTG CTAACCACATC TGTAATGCAC AGAACAAACC
 36651 CCTACAACAA ATAATTATCT GGGCTAAAAT GTCAATAATG CTGAGGTTAA
 36701 GAAACCTCAT TCTATTTTT GTACTCATTAA ACTATCCCCC TCAAAACATC
 36751 TCATGTACCC CATAAATATA TATACTACT ATGTACCCAA AAATTAACAA
 36801 TAAAAAAAGAG TATAAAATAA AAAAAAAACCA CCACCTAGTC TAGTTCTTTT
 36851 TTGCGAACAG TTGCTGGCAG TGTTCCCTC TGCTATTTC TTGTTGCGAA
 36901 CCTGGATGGG CTACTCAGAG TGTTCTTGT TCAGAATCAA CTTCAGCTGG
 36951 CTTACTCTTA GTGGGAAGGC AAAACTTGGG AGATAAGGGT CATCTCAATT
 37001 TCTCCTTCTT TTAAGCAGTA GTGGTAGGCC CTGTAGCTGG AATACAAACC
 37051 ACAACCCCTCT CTCCTGATTC ACTATAAGAA CCTGGCTTGG ACTTCTCAAG
 37101 ATAGTTTCTC CTCTCTCATTT CCCTGGCTTG GTTGGAACAC ACTCCACTCA
 37151 GTAAGTTGGA GAGTCTCTGT GGGTATACAA CTGGCAGCTTT GATTGCCGCA
 37201 ACTTTGTTAT CTGATCAT GGTTATATAAT AATCAGGATG AAAGTCAACT
 37251 TTCTCTATTAG TAATTAGCA ACAGTCACTC AACACTGTAA AGAAAACATA
 37301 CTCCCTGAGA AATTAACAG AGTCATTTTC TTGTTGGTGAAGAGTCCTGG
 37351 GTTTCCTCTA GTGGGTCTAG ATTTCAGCCT TGGCTACTAA ACTTGCTCAT
 37401 GGGCCTCTGT TTCTTATCT GTATGATGGG AATAATAATT TCTGCCCTGA
 37451 TTACATTTAAT GATGGAGGAGG ATCTATAAGA TGGCTCTAA GTTCTGTTAA
 37501 ATGTACCGCA GTTCTCCCCC AAAAGTGAAGA CTTGGGATTG GGAAAACCTC
 37551 TACACAAATCC CAGTCTATGA ATTAACACTT AGGAATCACT GCATTATTAT
 37601 TTGAAGAAGT ATATTTATAA CTGCAGCATA TCAGCAAAAT GAGGCCAATA
 37651 TAGTAAGCCA AAATGTATAT TTTAAAGGAC TCATATTCTA AGCTTATAC
 37701 CTTTTTTGTC TCAAATACCT TTTCTATTAT GCAATGTTAT GGTGATAGAT
 37751 TGCAAGATGT TTGTTGTTGT TTTAAACAA CTTACATGAA AATATCAAAC
 37801 ATTAACAAACCT TGATATCAGTC CCAGAAATGT CTTAAATAT TTTTCTGATC
 37851 TTGAAACTG AACTCCAAAGG AACTCTGCAA AGTCTCCTCA GCAGGAATGT
 37901 TATCATGGAT GATACATGT GAATAAAGTT GTGTGAATGT AAACCTGGATG
 37951 CATTGGTAT GTTAAAAATAA CTGTCACAT GCTTTATTAA TTCATGCACA
 38001 ATCATCTGCA GGAGGCAGAT CCTATTGCG CGGGATCACA CTGAAACACA
 38051 AAGAGGGTGA ATATGTGCAC AGGGCAGCAA AGCAAAAGA TCAGCAGCTT
 38101 TGGACTCAGG CAAAGCTGAT GTCCCTGCTG AGCTCAGCCA CTTATCAGCT
 38151 TCATGACTCT ATGCTAAATT TTAAGAGCCT CAGTTCTTC ATCTGCAAAA
 38201 ATGGAAATAG TAATACCTAC CCACAGGGTT GTTGTGTGCA CTAAGTGAGC
 38251 CAATATAGGG AAGAGGCTAG ATAGAGAGAC TAGCAGCTTG TGGGTGCTCA
 38301 GGGTTGTTTG TTTCATTCAT TTAAATTATT TCCAGTATCC CCTAGTGTGT
 38351 AAATAGTGA TCTGTGACAT GGAGGCTCTT CCAAATTAA TCCAGTGCCA
 38401 TATGCCCTCG TGATGCTGAT CATAATCTTG AGAACACAAT CCTGAACCTCC
 38451 GCAATCTGAA ATACTGAAAT CGCAAAATT CAAACATCCCT AAAGTCTAAA
 38501 ATTTCCAATA GCTAAATCTC TGAAACACAA ATTGTTGAAA GATTAACATT
 38551 GCAAATCTTG AAATCTGCA AATCAAATCC TGGGGAAAGGG ATTAGTGTAT
 38601 TTTTGGTTGT ACACAGGATA GGTGCTCATGT GTTGTGTTACA TCATATTAGG
 38651 CAGAACTCTT ATCCTGTTAT TGTCITCATT TGAAATTAA TTATGGTTA
 38701 AGGAGATGCA TATTGGAGCT GACAAGGGGC AGACATGTGG GCTTAATT
 38751 AGGTGTACAC TTGACTGGAT TAAGGAATAT CTAAAACCTG GTAAAACATT
 38801 ACTTTTGGTG TGTCTGTGAG TGTGTCTTCA GAGGAGTGTG TGACCTAAGT
 38851 GGATTAGGGC GGGAAAGATCT GCCCTCAGTG GTGGCAGGCA CCCTCAATC
 38901 AGCAGAGGGC ACAGGAAGAA CAAATACAGA AGTCAAATTG GTCTCTCTGG
 38951 CAGCTGGCTG GCTTTCTTC TACTGCACTG GACATCAGAA ATATTCCAAA
 39001 AAGTGTAGTT TCACAATGTT CACTTCTCC ATAAGCATCA TGTGTGTACA

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39051 TGAAAACATG GAAACTTCCT TAATAAATGT AGAGATGTCT TTTTGTATAT
39101 CTTCGTTGGT GAAATGGAAC ATTTCTTGAG ATCTCAGTTC TGTGAGCAAT
39151 TGCAAGTGTG GTGATGACCC ATTGCAGTTC TTGATCAATT TCGTCAAAAG
39201 ATTTAGGTG TCCATCATGT ATTCAGATG ATTGCAGTAG TAAAGCTTAG
39251 TGCACACAAT TACCAACCAC AGTTATATAC ATTTGAAAT TTTACTTTT
39301 GACTTATTAC TTTATGAGTA CAGTTCACTT GCACATCTT GTGTAACCA
39351 TGAAACTGCCC ATTAGTACAC CTGAGTGTG ATGCTTGCAG AAAATGTTAT
39401 GTTATTATG AATATTTAT TGTATAGAGT GGACTATGTG TGTTCTTGC
39451 ATTTTATTT TTCTCAAAC ATATAGACAT TATTTATGT TTCTCAAATA
39501 AAAAGAACAT TGCCCTTTA AAATGTGAAT AAATGTCTT TAAATTTCT
39551 TTTTATTATT TTTTCCAGAA TATGTTTTG GTTTTGAT CTTTTGAGAT
39601 TTCAACATTG GGGATTATGG TGTTGGAT TGTGTCCTTC AGGATTATAG
39651 CCAAACCCAT TTCTCTCTG CCTCTGAACA TCTGCAAAC CACTATTCTA
39701 GTCCCTACTT TTAAGGGTAC AGGCTCAGAG GACTAAACTG AGGTTCTCAA
39751 GCTTTATGT GCATCAGAG CACCTGGAAA ACTTGTAAA ACACAGCTTG
39801 CAAGGCCAAC CCCAGAATT TCGATTGGG AGGTCTGGTG TGAGGACAAG
39851 AATTTCACATT TCTACCAAGT TCCAGGTGAT GCTGATGCTG CTGGTCCAGG
39901 GACCACCTT TGAGAACATC TGAGCTAAAT GTTCTTTCT CTTTCAGCA
39951 ACATTCACT CCTGTGGTTC CTGACTGTG TTGGCAGTT TCCCACAATT
40001 TTCCAAAATC GGTCTTCATC CAGTGTCTCC TCTCATAGTA GACATCACAT
40051 TCATCCAGAA AATAAGGCAT TCTCCATAT GCCTTCTTCT CTCTTCTCC
40101 ACGTTCTTC TGTCTTCAGG CATTGCTCA CTGGTCCCTG GCCCAGTCTG
40151 TCAATCAGCT GACATCACTG CCCCCACTTG CTTGAAATCA TGCCTCTCC
40201 CTTAATGTCT ATGTGTCTT GCATAGGTG GTTACAGAG TAGATATACA
40251 AAGAATGAAT GAGTCTCCCC ATCTTCCGA CCTCAAGAAC TTGATTAGTG
40301 GTATCCTGAC TGGAACATG GAATATGGCC TTTGTCCTGC AAACAGAAAC
40351 AATTATAGCA GTTTTCTCA CTAGGGTCAAT GTTGCCTAT TTTATGTTAA
40401 TAAGAGCTGT TGTATTGACT TAGCTGTCT TATTCTAGTC ACTTCTGCTT
40451 CACAATAAGA GGCTATCTGT GCTTGCCTTC CAGGGGGTGA GTTACTGTCT
40501 TATATTGTCT GACAGGGCTG TCCCTGAGG AATATCTTCC CCAATGCCA
40551 GTTCTTGTAG AGGGGCCAGG AGGTCAAGAC TTAAGCTAAC AAATGATTAT
40601 CTTTCTCAGC AGAATTACCA GAGGACCTCA GACTCCTGGG TTCCTCTTA
40651 AGGGACTCAG GTTCAGATCT TTGGCCCAGA ACACACTGTA ACCTCTGAGT
40701 TCAGGCTTAA GATGAGGCAC CTGTCATTC CTATGGGACC TCAACCCAGT
40751 CTCAAAATACT TGTCAGAAAG GTGAGTTGAA ACTAAAAACA GTACCCAGCC
40801 CTGGACAGTA TAAGTTGGTC TCATCACATC GAAGTATTCA TGATGAGCAT
40851 CATAAAATCT TCTGAGAGTT GTTTTGTATG AACAGATAAG GAAGAATACC
40901 AACACCCCTAA AAGTTGAGGG CAATTCAAGT CCAGATGAGA AGAAACGTGC
40951 AGGATTGCAAG ACTTGGAAATC CCAAAGAGGC ACTTAGTAAT GTTATAAAC
41001 TCTGAGGGT ATTCTGTAATC GATGCTGGC CTGGGGTAA ATGGATATCC
41051 TGAGGCTTTG GGCAGAACAG TTGCAAACTC CCCAACCTTC TGCTTTCTT
41101 GGAGGTGATG TTGATGAA AAGAGCAGTT TTCTGAAATT CACACAATAA
41151 AATGAGGCCCT CTCATTCAG GCCCTGCTG GGGTAATCTT GGGCAATATG
41201 CTTCCCTCT CGACGCTTA TTACCTGTT CCCTCATTTT CGAAGCAGAT
41251 TCTAACCTCC GATCTGCTTC TGTGGTGGCC TCACTGGGAT ATTCTGAAGC
41301 TCAAGTGTG CTGCTGCTAA TAATAATAAT ACCAATTACT ATAGCAACAG
41351 CAACAACCTC AACTGTGAGC ACTTGTGCTG TGCCCAGCTC TGCAGGATGGT
41401 CTCATGTGTT CCATCAGCCC GTTCTACAG AAGTTCTGGT AGGTAGTTAC
41451 TATCATTATA CCCATCCAT AGCCAAAAAA ACTCAGCCAC AGAAAGGTTA
41501 AATAGCTTG CTCAGGTAC AGACTAATA GTGGTAGAGT CTGTAATGGA
41551 ACCCAGCACT GTCTGCTCATT TAACTGCTAT GTTACACTGC TCTGTAATG
41601 TTAAAATTAC TTTGGTGA CTTTAAGTAA CTATCAATGG AAGATGATTT
41651 CTTGCCATG CGACAGTTG CTCTCCAAGC TTTAAGCGGA TCACCAAGGA
41701 GTCTAACTCC TCTGCCCTG ACTGCCCTCA TCTGGTTTC TTGCCCTGCA
41751 TGGGTTCATC TTTCTTGT TTCCCTCTC TGGCATTATG AAAATGAGAA
41801 GCAGCTGTGA GCCCTGCAGA TTGCAAATGG GATTGTGAGT GTTGTATCT
41851 CTCTAACAC TAATTCATTA CCCAGTGGCA GATAGTTCC GCTGTGCTGT
41901 TACAATCTAT TTGACTTCA GGTGCCACAT GGAATAAAAAA ACAATTGTT
41951 CAACAGTTG GCCTGGGTGT TTGCAATTAG ACAGGCATGC TTTACCTCCC
42001 TATGTCCTTG AGGGCTGCC TCTCTGGTAA GGAGCCTTCT TTCTGGCAG
42051 GAAAAGCTCA CTGCAACAGT GATAACACT GAAGGATATG TCTGGACTTG
42101 GAAGTAACCA GATCTAACCA GCCATACCTT TCAGAAAATA TTCCAAAAAT
42151 AGTTACTGAA CACCTATGAT GTGCCAGTTA CTGTCAGGAG AGCTGGCTAT
42201 GCAGTGACAG TAAGAGACAG GCAAGCTCTG CTCTTAAAT AAGCACATCT
42251 GCAGATAACT AATAGCAGTA ACTTCAGATA ATAATAAAGG TCAGGGGGAA
42301 AATAAGACTG GGTGATGTGA CAGAGAGCTG TTGGCTGGA CAGGGACAGA
42351 GAGGGATGGT TGAAGAAGAG ATACATGAGC TAAGATGAGA ATGGTAAGTG
42401 AGAGTTGGCT GTGGGATAAT AGTGGGAAA AATATTCTAG CCAGAGGGAA
42451 CTTCAAGTAC AAAAGTTTT AGGTGGGTAC AAGTTGAGAT GTTCAAGTA
42501 ATAGAAAGGA AGCCCCACATG GGGTTGGGA GGTGGTGAGC CCTAGAGGTA
42551 GAGTGCTAGG AGAGGTGGT GTAGGGTCAG TCAGGGACAA ATGATGCGAG

42601 GCCTTCTAGA CCATGGGCCT TCCTGGGAT CTTCTTTTC AGCCCTAC
 42651 GGGCCCAGCC AACCAAGCA GGAACCTGCCT TCTGTGATT CATCATATCT
 42701 CTGAAGTCCA ACCCAAACCTCTCCAAGGC CAAGTCTGTG TCTTTTCTT
 42751 TCTAAATATC CTCACCCAAA TCTTACACAG TTCTTGACAC ATAGCAGATT
 42801 CTCAGGATAG CCTGATGACT TCAAGGTATA AGTTAAGGAA GATATTGCAG
 42851 ACCACAGATA TATTTTATTA ATAACCAAGG AAGAGCTTAT ATTAGCAAA
 42901 AGTCTGACT TCCTCAGTAG GTACTAAGCT CCCCTGTTACT AGAGGTACAT
 42951 AAGCAGAAGA TGGAAGATCA GTTGGTGGGA ATGTATTGAA TAGAGGTAGT
 43001 AGTCATGGTG TTTTGCAATA GAGATAGCAG TAGTGGTCAC AATGATAAAA
 43051 ATAGTAATAT TCCTATGTAT TAAACAGTCATA ATATATGCCA GACCCTAGAT
 43101 GTATATTATC TCATTTAACG TTCTAAAC AACCTCATAA GGAAATACCA
 43151 TTATTATTTC CACTTCCAGT CACAGAGACT GAAACCTCTC ACATTTAAGG
 43201 ACTGTGCACC TGGGGTCAGG TAGTGGTAA GTGGTAGGTT CCACCTGAAA
 43251 ACCCATACTT CCAGTCCATCT CTTGAAAACC CTCTCTAGGG AAACCTTATG
 43301 ATTGGAGTC ATTTTTGAC TTCATGTATC TTGGCTTTT ATTCTTATCC
 43351 AGACCTTAT TGCAGGGTGT AGGGGGTGT ACTCTTTAC AGCCTTACA
 43401 GCCCTTTAC ATATATTAGG TAATAATATA GAATTGAATT CTAAAATAGC
 43451 TGAAAGTATG TTTTTCTC CAGCAAAATC ATTCCTTAAAC GATCATCCCC
 43501 AAACTGTGTA GTATCTTGT CTTGAGCA TTACTGTACT GATCTTCTC
 43551 CCGTCATGTA GTACTTTGT ATTGGAGTCATC TTGGCTTTT ATTCTTATCC
 43601 CAAGAGTAGG TGCTGTTGCC TTACACTGT TAAGCATTCT CATAGACCTC
 43651 TGAATTCTTCT CAGACCTCAC ACTCCTCTC TTGTGTGATT TAATATCTGT
 43701 CTTCCCAACA GGGACTCAAG CTATATCCCC AGTACCTAGC AAATGGCAAG
 43751 TGGCAGACAC CCAATAGACA GGCTGAATGA ATGAATGCTA AGTTCTGTCT
 43801 ATCATCTTC TACCATGGCT GCTCCCATTT AGTGGAAACG TGTGCTCTTC
 43851 AGTTTCCACA AACCCACAG CAGTGTCTTG GACTCCTCAA CATTGAGGAT
 43901 GTCACTGTATG TGTCAATTAT TATTATCCTT GCTTTGTGA CACCCACAG
 43951 GCTCACTGGA TCACATTGTC ACCCTAGCCC CTGTGGGCAT CTGGATTGG
 44001 GAACCTTAAAC CTGAGGATATC TTGTTAAAACC TCCTGGTGT TCCGGTTTGG
 44051 GAAGTAGGCT GTAGAGTCAA TACCTGCGGT CAAACATCAG CCCTACATCC
 44101 TCACTAATTG TGTGACCTTG AGCAAGCCCC TTACTTCAT CTAGCTATA
 44151 AAAATAAAAT AAATAAAATAA AACAGTCACC TCTGCATAGG TGTATGGCAA
 44201 GGACTGAGTC AAGAAATTT TAAGAACACT TAGCCCCAGGA CCTAGAAAGAT
 44251 TCTAGTAAGG GTTTAGTAAA TGTTAATTAT GGTGTTAGT AACATCATCA
 44301 AATTTTAAATTAATTTAC ACTGACTTT TGTAATCTA GACTTGTAG
 44351 CTCTGGTGTG CATCCAAATG TACAAACCCCC CATATTCAAC ATTCTCTTT
 44401 GAAAGGTTTC ACAGAATGTT GTCTGAGCTG ACCTTAAAGA TACCTTGAG
 44451 CTCCAAAGTT CTGTGACTTT CACCAGGAGT CTCAAGGCAA ATGCACAGAA
 44501 GGGTCAGGCA AGTATCGTA ATGGAGGCTG GACCAGGGAG CCCATGCATT
 44551 CTTCCAAAGG CATTCAATT CAGTCTGTT AAAGCACTGA GTTGCACAAA
 44601 AGAAACGTCA CTGTTGGCCA GCCTCGGTTC TTGGCTAGC TCCTTCACCC
 44651 CAAGTGTATC ATCTAGGATG GAGGAGGCTT CTGAGGGACT GAGGGAGGAC
 44701 AAATCTGGAA AAGAGAGGTA CAAGGAAGAG ATGGGATTTG GATAAGGCAA
 44751 GGAAGACCCA GGAGGCTTG GATGAACCTGA CCTCTAGATA CATTCAATT
 44801 TATGCCAAAAT GTCCATTCTC CACTCTTAA ACCCCTTCAC CTCTCTCAA
 44851 GAAACTTGTTG TCTCAGCTTC AGAGAGCCAT GGCTCTATT AAAATGTTGT
 44901 GAAAGAAGGT GATGGAAGCA TCAGGTTCTC AGGCTGGTGA ATTCTTATTT
 44951 TTATTTCTC ATTGACACAG TTAAACCTTT GCTTTGGCA GCTAGCATAT
 45001 TGCTCAAATA AAGTGAAGAG AAGGGTGTGG GGGAGAAGGC AGAGATATT
 45051 TGGCTAGAAG GTTATGAGAA TCACAAATAGC TGTCATATGA GTGCCGAGCA
 45101 TTCTTCTAAAG CACATCCCAT GCATAATCTC ATTAAATGCT CACAATAGTC
 45151 CTCTGAAGTC TAATGTCTAT TTGAAAAGG GAAGCTTATC TGAGGTTTAG
 45201 CATAGAATAA CTCACCCATG GTCACCTATG TGAAAAAAAGT GCAGAGCTAA
 45251 GAATGGAATT GAAATCTGTC AAACCTCAGA GTTAGAGAC TGACCAAGTA
 45301 GACCCCCCCCAC TTCCAGGCCA ATGCATTTCG GCACCTGATT TGTGGCAAGG
 45351 AGTCCTCTCA GGGTTTGGG GCTATGCTGG TGCTTGCTAT GCTGCCCTGG
 45401 AAATGTCACC TAACCTAGAA ATAGTGTATA TTCTGTTACA AAGCAAGTTG
 45451 GAAGAAAAGA AAACACTCTT TTCTCTTTT CTCTGTGCCT CCTCTCCTTA
 45501 CTTTCCCCCTG AAACCTTAAGT TCCAAGGAGT GCAATTAGCA GGTAGCTTG
 45551 TCTTGCTGAA CAGTCAGGTT ACTTTCCCTC AGTATTGAT GCCAAGTGA
 45601 TGTGAGCTG AAAGGCTGGC TGATAATGC CCCTCTGGGG AGAAGGAAC
 45651 GTGAAATAGC CTGGATCTAT TGCCAGATAC TAGGGCCAAA AAGTCCTTAG
 45701 AAACCTCAACC TGAAAAAAAT GTCTAGGGAA AGCAAAACGG CCAACTAAGG
 45751 TAGTAAACAC TTCAGAAAAC CTTGATAATA GCAATTGGA AAATCTTGCA
 45801 TGTACAGTTT CATTTCATAA ACCCCTCCAG TCATGGGATG GATACAGATG
 45851 TCTTGCTGAA AAATGTAACG GTTAAATTAA CAGATAATAA TGTATTGGTA
 45901 GTTGCTCACA GAAAGACAGT ATCACGTTGT GGAGTAAGTG CTTGACTGAG
 45951 ACTAAAAGT CTTGGATGAA GCCTCAGGGT CATCATTAC AGCTGTGTGA
 46001 CCCTGAAGAA GTCAGGCATT TTCTTGGCCA TCTATGAAAGT TGGATTTAA
 46051 CTCCCAACC CTAATCCACC AGCCATTCTT AATCAAGGAG TCAGATAAAAT
 46101 GTCTGGCCCCC TGTGGGATTC ATTCACTGT CTTCAAGAGAA AAGGGCATAT

46151 TTGAAAAAGT GTATTCTACA CGGTAACCTT CTAGAGAGGC ACAGGCCTTT
 46201 TTTTGTTTG TTTGTTTG TTTGTTTG TTTTATTTT GAGGTGGAGT
 46251 CTCTGTTGCC CCAGGCTGGA GTGCAGTGGC ACAATCTGG TTCATTATAA
 46301 CTTTACCTC CTGGGTTCAA GCAATTCTCC TGCCACAGCC TCCTGAGTAG
 46351 CTCGGATTAC AGGCATGCAT CACCATGCCT GGCAAAGTTC TGTATCTTTA
 46401 GTAGAGACAG GGCTTCCCCA TGTTGCCAG GCTGGTCTTG AACTCCTGAC
 46451 CTCAAGCGAT CTGGCCGTCT CGGCCCTCCA AAATGCTGGG ATTGCAAGGCA
 46501 TGAGCCACGG CACCCAGCCC AACACAGGCC ATTTTAATG GGTTGTTAGG
 46551 ATAAGGTGGG TAAATAGATG TGAACCGTGC ATGAAATTT AGAATGTCAA
 46601 ACACGTACAG ACTAATGCTA TTTACCCACC ATCCACCACC ATTGTTTATC
 46651 CAGTTGTTA TTCAATTGCA AATGGCTTCT TAGCCTGTT GAGAAATGAT
 46701 CTGAGGTGGT CAGAGGTATG GCCCCATATCT GTCAAATAAA GCAACCTCCT
 46751 GGCACATATG ATAGGCCAAA ACCCTATCAC TTGGGATTG TGAACAACAT
 46801 TCTCAGTCA GCTGAACAAG CAGGTGCTAG AAAAGAGTGT AAATAATTCA
 46851 ACTTGTTCAG GCACATGTGT TTAGGTGAGT AACGTGAATG TGAACAGTT
 46901 TTATCTTTA TTTCTGTC TCAAGTTGGC ACTATTAGGC ATCCATTCCCT
 46951 AACATAAAAT AGTGTCTATG AATGGCAGCT GGTCAATTAGA TGTACATATC
 47001 CAAATCCAAG ATCAGTACAA TTTTCACCTC CACCTTGTCT TACCTCTTGC
 47051 ACTCCCTAAC TCAGTGGCAG TGCCACAATC CACCTAATCA CCCAGAAAGA
 47101 GACCAAGAGA CTTTTGATTC TTTTCCCTT ATCCATGTCT TTGATCTGCC
 47151 ACCAAGGTTCT GGAGCTGTTA CCTCTACTGT CTCCTCTAA TCTGTCACGC
 47201 TGTCAATGGT GGCAGGAAT ACCGACAGCA GCTCCTAATC GGCTTCTGCC
 47251 ACCACTGCTT ACCCACTGCC AAATCCATCC CAATTCTTGC TGTCAAGAATC
 47301 GTCTTTAA ACAAAATCAT CTACTGTGGC ACTCCCTGTT CCACACCTGG
 47351 GGAAATCCAG CCTCCGTAGT GTGATATTGA AGGCTCAGCA GACTCTGACC
 47401 CTGTCCTACATC TCAATTGTC TTCCACACCC CTCCCTAA TTATGCCACA
 47451 AATTCTTGTG TGTGTTCTAA ACAATAGCCA GATTCCCTTC ATTTCCCTCC
 47501 TGTGTTCTGC CTCTGACCAA ACTCAATTG CCAGCAATGC TCTCTGGTT
 47551 TTTCTTCTTC TCATCCCTGT CTCTCTCAA GACTTTTAAT CGTCCCTCAG
 47601 GGCAAGTTT AGATCTAAC CCTACCAATA AGCTTCTTC AATCTCCAC
 47651 CCCTACCTCC ACAAGAAATTA GCCTTCCCCC ATTATATATCCC TTATCATTTCT
 47701 GCCGTACATT AGCAAGATTT GTATGCATGA CTGTTAGACT GACAGCTCCC
 47751 TTTGGGGAA AGGGCTTCT TGTGTCATC TGTCATCTC CTTTCTCTCT
 47801 TCTCTCTCT GCCTCCTCCC TCCTAACCTC CTCCAGGCCA GCATCTAAGT
 47851 GCAGTACATT TCACATAAGA GACACCCAG CAAAGTGTGT TGAATAGAAT
 47901 CCATTAATTG GCATTCATT TCTTGGAAA TAGCTTTGG GATCCATTGG
 47951 GCAGATAGT AAAATTCAA CTAACATGAT GGTTGAGAAA AACCTTAACT
 48001 TTTGTGCTCA TGTAAATTT AGAAACATTG TGTTTCAATT TATCACCTCT
 48051 GCTAACCTCT TAACTAACCT GAGGTATGG AGAAAGGGCA GAAGACTTAT
 48101 TTTCTACTT CTTTAATATT TCCGGTCAAT TCTCTCTTCT CCATCACTAT
 48151 TGCCAGTGCCTTCTGAGA CAGGTCACT TTGTGGTTAA AGTTTGAAGT
 48201 CCCTGAGATA AGACTATCTG GGTTTTAATA CTAGTTATGC TAACAGACAG
 48251 ACCTGGGTG AGTTAGTTAC TCTTCTGGG CCTCAGTTTC CTCAACCATA
 48301 AAATGAAAAT ATTAATGCTA CCCATTGT AGAGAGAGAT TCCACAGGCC
 48351 TAGTTGTTGG CCAGGGAAACC CTGGGATAAT AAAAGCAATC GGACATCTTG
 48401 GGAACCAGGT AATCTCTAA CATTCCAAAG ATACCTGCTG TCCCCTCTCA
 48451 ACGCCATACA GTGTGTGCCA GTAGATTATA AACTGCATAA GGAAAGAGAT
 48501 GATGTCGCT CTCTCCATA TCCCTGGCTC CTGACACATA AGAGGATCAT
 48551 AAACCAACT TGCACAGCAA ATGCCAGCTC TGGAAATTCTG CAGCAGCTG
 48601 GAGACAGAC CCTGCACATC AAGGCCAGT GGAAAACCAA TGATTTCTCC
 48651 CCCGCAGAC TGCCTAGCGA AGGGCCCCGT GGAGCTTGGC TGGTGAGAGC
 48701 ATTCTTCATT CTCCGCATGT CCCTGGCTCT CCCTCTCTCT CCCCACCTCC
 48751 GCAGCCTCCC AGTCAAGCTA TTGTGCATCT CCTGCTCTCT GTGTCTCGCT
 48801 GCCTGGTCC CTTCTGCGC TGCTGCCAA GCATTGTCTG TGATGTCTTT
 48851 AGTGTGAAAG GTGATTCAAC GAAATAAATT GCATTGTGTT TTAGGTCCAT
 48901 AGCAATCTAC CTCTGTAATC ATGTCGTAA GGGACTTCAT AATAGTGTGA
 48951 GGGCTTGGT GTCAGAACCA GGGTCCAG TGGCTTCAAG ATAGATAAGT
 49001 GCTGCAACCA AATGCACATT CAGCCAGTGA AGTTGCAAGT TAGAGGTGAA
 49051 GATGGAGGT CTGCTGCTAT GAAGCAACCA TACTCTCAGC CTTTTTATCT
 49101 GCAGGTTGAT AAAATCAAT CAAAACATGA GATGTGGTTT TTTGTTGTT
 49151 TTTAATAACC ACTGGAAAAC TAAGACTTGT TTAAATAGAT CTCAGCCAAC
 49201 AGCTTGTGCT CTTACCAGCC CTGTGATTAG ACGAAAGGGA AAGTTCAAAG
 49251 TGTCACTAG AAGGGGAGG CACCAAAGGA AAAGAGGCCAG GGAGGTGATA
 49301 CAGTGAAGG CAAGGAGGAG CTGGGCTGGA ATCTGAGAAA CCTGAGACTG
 49351 ATTTGTTCTA ATCATCATCC TATGTGATGG TGGAAGATAA GAACCACAGA
 49401 TTCTGGAAGG AAATTGATGG CATAGACTCA ACAACAGTGG GATGAATATT
 49451 TATACACAAT AAAAGGGGGG CAAGCTGGTT CTCCAAAAT ATTTAGAAAT
 49501 GATGGGAAGT AGGGGAATT GTGCTCCCTT GATCACATTA TTCAGAAAGTG
 49551 ACTGCAATTCT TATGCAATT TTAACAGTTT ATTGAGATAT AATTTATATG
 49601 CCATAGAGTT TACTTATTTA AAGTGTATAT CTCATGACAT TTTAAGGTGA
 49651 TATATTGTTA AGTCTATGAC AAAAGATT AAAGGAAGCA ATGTGAAACCA

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49701 AAGACCACAA GATGAGTAGA GAGGCTGTCA AAGGTGGAGG GGTGTTTTT
 49751 TAATGTGTCT GCTTCCCCAG CAACTGGTAG ATCTGCCCTC ATCCCACCTC
 49801 CCACCAACCA AGGTCTGGCT ATGCCTGCAG GTTCACTACA TGAAGTAAGA
 49851 ATAGGTGGCT CTTAGTCAGC TCACAGGACA CTCACACAGC TAAATGCTAG
 49901 GAATCCCTCT GGGAGGTCTA CTGCAATCTT GGAGGTTTAG AATTGTTCC
 49951 GCTTGAACCT TCAGATTATG AGTCCCACTG CACAGCCACC CACCCACCC
 50001 TTTTGTGTGA CACTTGCCTG AGCACAACAT GTCCCTATT CTCCTCTAA
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 79101 GAAACAAGGC TTAGAGGTA CAGTGTGGT AATAAGGGAA AGAATAGTAG
 79151 GAGATAAAAA TAGAGAGGTA GGCTGGGGTC AGATTATGAA GGATCTAGTA
 79201 GACACTAATA AGAAATTGG AATTATTCCG AGTACAGTAT ATTGGAAAGC
 79251 CAGTAAGTCA GGGATAAATG GGTGCTCTCA AATATAGGAA ATAAGCTGTA
 79301 GATTGGGGT TTTGCTCCAC TTTATTTAT TTTGAGTTTT TGTGGGTTT
 79351 TGTTGTTGTT TTTGCTCAAG GATCCACAAT CAGAGAGTGA TAGAGCTAGG
 79401 ACTAAACCC AAGTCTCCAG GCTAGTAAGC TATAGGTCTT TCTATTAAAC
 79451 ACGGGTGACG AAGCAGTCTA CATTATTAA CTGTAGGATT GCAATTGGCC
 79501 GTTACTCTAA CTGACCTTC CCTGAATCCA CCTGTGTTAA GAATTCTAA
 79551 TATAGTACTT AGCATTGGC ATGAAATCA AAGAAGATGA ACTTTAGCAA
 79601 GAAGCTAATC CAAATCTGCT TCACAGACCA GCAGCATCAG CATCACCTGG
 79651 AAAACTGTTA GAAATGCAGA ATCTCAGGCC CACCTCAAAC CTACTGAATT
 79701 AAAATCTGTG CCTGATAGT CCCTAGTTAA TTAGTATGCA TGTTAAAGCT
 79751 TGAGAACAC TGATCTAGTT TATCAAAATA TCATCAGAAA CAGTCGAGTG
 79801 ATTCAAATGG TTTTTTTAA TGGGCTTTA CTGAGTCAGA AGACTAATGA
 79851 TGTTGTCATC ATTAAGCTAC CATTATAACA TCTTTTTAT TCTTTCTTT
 79901 CTTTGCTCA CAGCAATTCT CTACTCACAA AGTCTTATGT AGTCTTCTT
 79951 AATAACAGCA TACATTCTT CCTTTCATTT CTGCAGGCCAC CACCTTGTC
 80001 TTTACCCCTCA CTAATTGTA CCTAGCTTAT TATAGCCATA TCAAAATTAA
 80051 TGCCCTCCCTC CCTTCATGCC CTTCATGCC TAGAGCTCTC CGAATCTCAA
 80101 ACTTCATATG GCTTTTCTT GTCTTCAGAG TAAAATTCACT ATTTCCTAACT
 80151 CTGACTTTGA AGGCCCTCTA TATCAAAACT CCAAACACGT TTCCCAGAGA
 80201 ATCTGTTGTG TGTATGCTT TAAGTCCATG TCTTGTTCAC CACCCCTGGAA
 80251 TGCCCTTCC CTCATTTCTC ACTGCTTCA AGGCTCTGCT GAAATCCAC
 80301 TTCCATCAGT GATGTCAAAT CTACCCAGTT GCCTACCCAG GTTCTACGGC
 80351 ACTTGTGCG TGTACCAATT ATTTTTGGT GGGGGGGTCT GATAGCATTA
 80401 TAATTCAGG CACAAGCACA GGTCTCATA ACTAAATTGT AGTTCATGGAA
 80451 GAACAGAGGC CACATCTTG TCTGCTCCCA CTCTAATGCT TAGTAAGGCCA
 80501 CTAAGCATGT AGTAGGTAAT CAGTAAATAT TTTGCTTTG ATCTGAAGT
 80551 TGTTGAGTAA TGCCCGAGATT TACAAGCAGT TCCTTCTAC TAATTTATT
 80601 TCTCTAAAGGG TCTATGCTAC AGTTCAGCA TTGTGAAAC AGCATTGTT
 80651 ATAAAGCCAG CCATGGGTAA GCAGTCTCG ATCAGCTGGG TGGTAGGCAA
 80701 TGGATGCAGT CCAGAATTTC AGGCCAAATA AAATTGTGAA TCTTTATTTC
 80751 AAGAACCACT GTATTCTGTG GGACCAAGCT CTGTTCCGGG TGTCAGAAC
 80801 ATAGGTATCC CTCCCTGCTG CTGACCGAGCT GTATGGGGCA AAAAGCCCCG
 80851 ATTGAGCCCTG GCCGCCCTGA ACCTGGGATA GCCCAGATAT AAAATGATAA
 80901 TAACATTGAC CTGAAATTCT TATTGTTA CATTGTTGTG TTTGCTTAGT
 80951 ACTTCCTTCT TAAGTTGTT GGAAGAGCA TCTGCTGGTA ACTTGGCTCA
 81001 GTGTGTTGTA GGTTTTGTA TATGGTTGG GTTCCCTATT CCTGGGCATT
 81051 GAACTATTAA GATTCTGCA GATAGGCATA ACTACTTACA GCCTTTCTG
 81101 TGTATATATT AGCTCTTAGC GACCTCATAA ACCTAAAGAG GTGCAGAGGA
 81151 AAAGTGCCAT CATTCTCATT TTACAACGG GGAAGCAGAG CCCAGAAAA
 81201 GTGATCTAAC TTCCCAAGT TCACAAATGT GTTATTAGAG CTGCAACCCAG
 81251 AGCTAAGGTT GAGGGCTTAT GAACCTTAGG TTACTATTG GTTAATAGGC
 81301 TCAGTGCAGC CTTACCTTAC TAATTATTAA AAATAGACAA CATTAGGATT
 81351 TAAACCCAGAT GGTCTTCTC TTGTTGTCAC ACTCTTACCC ACTGTCAGCA
 81401 ATGGCCCATC AGATAATCCA CACTGATTCA TGAAAAGGCA AATATTCT
 81451 GTTTCTGTTCA TAAGCTAGGC TTGCAAAAC CGAGAGCAAT ATTCTCTATC
 81501 CCCGAGATGC ATTGCTCAA GCACCTATCT ACTTTCTCTG CAAAGTTATC
 81551 CCTTTGGCAA TGGTCTCA ATTCTGATTA TATCTGGGAG AGAAATAATA
 81601 AACCTATTAA GATGCTAATT GGCTTAACA TCTCAGTGAG TCAACAGGCT

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81651 CATGTATGTC CTACAAGAAG TCTCTAAAC CTGGATCATA CAGCTATCAA
 81701 ACAGTGGTC TCAGCCACCA ACTTCAAAAT GGCTCAATCC ATTTGAGTTT
 81751 ACAAAGCATT CCATTTATA GCAAAGGACA TCTGTGCTAA GGATAGTGTGTC
 81801 TTAAAGGCTA GGCTTTGAG GTGGCAATTAA TTTCTTGCT GAGGTTTCAG
 81851 AATAGACAAT TTTTTTCCCT ACATTAACAC AGAGAAATGA AGAGTCTGAG
 81901 TATTCTAGGA AGTTCATGGC ATAATGGTAA GCAGATAAAT TTCTGATATC
 81951 CTTCTGAAAATAAAGCTAGT AGCTTGTGA CCTCTGGCGC CTTATCTTCT
 82001 CCAAGCCTCG GTTTCTCAT CTGTAAAATG GAAGTCATAA TGGTACTTAC
 82051 AAGGCCAAAATGAGTACTAATGAGGAT AAATTAAAAA TATTTAGCTC
 82101 AATGCCCTGGC ACATAGTAAG TGCTTCATAA CAATTGAGTA CTAGTATTAC
 82151 TATTATTTAT TAATAATTCC TATAGTCAAA TAGAATAAGG AGTCCCCCTT
 82201 GTTCACTATA GATATTCAAGA ATGTCCTTCT CTCAGGCCTG AATGAGTAAT
 82251 TCCTCTGGA TTACTAATAT CAAAAGTCCA TTTGTATCTG ATTGAGATGA
 82301 GGAAGAATGCAGGATGGA GCAGGGAACC AGTCCTCACA CTACATGGT
 82351 TACTCCAGCG ATTCTCAACG TTAGCACTAC CTATGTTTG CACAGGGTTA
 82401 GTCTTGTGTTTGGGGGGCTG TCTGCACAA TGAGGATGT TCATCACTAT
 82451 CCTTGCCCTC TATCCATTAT AAGATGCCAG CAGCAAACCA ACCTCCCTCA
 82501 AGTTCTGATG ACCAAAACCA TATCCAGATA TTTGCCGACT GGGGGCACTT
 82551 GCCCCCAGTT GAGAGTCACT AATTACACAG TACATTGTC CATGATGGGG
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 82701 TGTCCCAACT ACTAAACTCT GCCATGTAGC TTGAAAGCAG CAAAGACAA
 82751 CACATAATG AACATGTCC AGCAAAACTA TTTATGGGCC CTGAAATTG
 82801 AATTTCTAT AATTTCTATG TGTCACTAAG TAATCTTTT AAAATTTTA
 82851 TTCAACCACCTAAAAATGTT AAAACTATAC ATGAGTCGTA CAAAATCAGG
 82901 TGTTGGGCTA GACTTGGCCC ATGAGCCATA GTTTCTGAC CTTTGGACTA
 82951 AGAAATACAT GAAGCCGTAATTCATATTATCCTAAGA TAAACATGGG
 83001 ATAAATATGA TACTTCTCCT AACACCATCA AATTACATA TAAATTTAG
 83051 AGAAAGCCTA TTATTTTATT AAAATGAGCA TTGCTATATT TTGGAATAGG
 83101 ACCCAAGGCC AATGAAATTAGAGATAAA ACATATATT CAAAGTTAT
 83151 ATCTTGTCTTC CCAATGGCTG TTGACCCATG CCTCAGGTCC CCAGAGGCT
 83201 TCATTTCTG CTTTCATTT CCCTTGCTTT TAGGCTACCT TGGTAGGAAA
 83251 ACTTAAGAAG TTGCCATGCC ATTTTAAGTG AGAAACTAAG TCATATAAGA
 83301 GCCTTTAGA CTTCCATAA CTGGTACCC TTAGATAGTG TCCAATAAGG
 83351 CACCTCAAAATTTCTAAGT GCTCTAGTGG TTGCTAATA TATTTCATCA
 83401 GAGAATGGTT GTGTAATATA CGATTGTTA ATCCAAGGTG GCTCCTATAA
 83451 ATCCTTTTG AAATGTTCAA GTATCTGT CACACACTTG GGGTATGAGG
 83501 TTTATTCACT TCCATTGTCA ACTAACGAGC ATGTTGACCC CACAGCTTGA
 83551 TGAGTACCCA GAAAATCAGC AAATGGTGTG GCCCTACTC TCAGGAAGCT
 83601 GGAATCTGAT GGTGATATTA GGACCTGCTC ATATGAGATG ACCCGCAAAG
 83651 AGTACACCAT CAAGAAAGGT GTTGTGGCAG AAGGAGAAGT GGAGTGGCAA
 83701 GCGGGAGGCA CATTTCCTAG CACCTCTGT GCATTCTCATC TGAAGGGAG
 83751 AGTTACTTTA CTTTGTGATA AGTTTTCTC TTCTGCCCCAG AGTGCTTTT
 83801 TGAGACAGAT TCTGAGACAT CATCCAAGTT CAGCTGGAA GAATGCCACA
 83851 ATTGATTAGA GCTGTCAGCC GTGGAATGGGA GATCAGGGAT TGGCTGGCAA
 83901 AAGTGCAGG GTGTTGACAG GCATAGTCCTC AGTCATCTCC ACAGTTCTC
 83951 CTGGCTGGAA ATGCCCTGCG CTATATTACC CTTATTGCA GATTTCATGG
 84001 TACTGATCAG ATCCAAAGAA GGAGGATGAT TGTGAGATGC AAAGCTCAGG
 84051 GGACGACTAC GCGGTGAGG TGAGAGAATG CCCAGAGCTT TGAAGAGGCT
 84101 GCTTCTTCTT CAAAGCTGTG TTCCAGCAGA GCACATTTCG TGCATACTTG
 84151 AATTGTTGGT GGCTCTAGGC TGAGGGCATT CTATTGTCG GTTGGCATGG
 84201 GAAGAGGGAG GCATGGAGA AATATGCACT CTCTGCTATT CTCCTGGGCC
 84251 CTTGTGAATG GGAATGTCTT CTTAATGAGC CTATCCCAGA GAGTCTGGCC
 84301 TTTCAGATAA ACAAAATAAGC ATCAGCAGGA GATGCTCACA AAAGGACTGG
 84351 GCAAAATAGG GCCACCTGTA GTGACAAACCC AAATAAAGGA GTCCTAAGAG
 84401 GTCTGAAGCT GGTGGCTAT GACCCACATCT CTCATTTGT GATTTCTTGG
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 84501 AGGAAGAACGCTTTCTGCTGG TACTGGCTTT TATTTTAT
 84551 GTTGGGCTAG GGGCTGGCCT GGAGGACATT TACAAGGTGA GGAGAAATCT
 84601 CAAGCTGATT TTAACCTAAC ACAATTTCCT TATCTTCTA GTGATATATA
 84651 TCAGTTTCTC CACTTGGGAA ATGGGAATAA AAATACAAC CACCTACTAG
 84701 AATTGTTGGG ATGATTAAAGT CGGATGATTC TCAGAAAGCA CTTCCCACAG
 84751 TTTCAGATAAATGAGTACAT TCTGATACAT GTTGGCTGCA ATCATTATTA
 84801 GTAACAGTAT TATCATCATC ATTTCATAT GTGGAAAGAT ACCAAAGGA
 84851 GTGTCCAGGG GTGAGGGATC TAGTTCAAT TCTGCTACCA GCTGGCTGTG
 84901 AGATTTAGG CAAGTCATCT CTCATGTCAA CTGAGAGTGC TGGACGGGAG
 84951 TTTTATTCACT TTTGTAAAC ATATTGGAG GACCTACTAA GTGCCAGGCT
 85001 CTATTTCCAG GGAGCAAATA TATAAAGGTG AATAAGACAC ATTTCTGTA
 85051 CTCAAGAGAT CCCAAAGGTA ATGGAGGAGA CAGGTAACAC ATGTGACCAC
 85101 ATAGCATGAG AATTGCTCTT ACTGTGTGGC TGCATGCCAA ATGCTCGTGA
 85151 GGCCTGGCAC GGAATTAGCA AGACTAAAGG CTCTGTCCCA GTCCAACCTT

85201 CTGTGAGTCT ATAACGTAAAG CATCCAAAGT ATAAGCTGGG TGATTAGGG
85251 AAGAAGAAGT CACCTAGCTG GCAAGGGGCC TAAAACCAA GTCCCCTCCT
85301 TCTAGGACCA GAGTACTCAC CAACTACCAA GTCGCCTAA AATAAAACAA
85351 TTCAAGAACAA AGTGATGTGC AGAGAGGCAA CACAGTGATA AGTAACGTGG
85401 GTCTGAAAT GGGAGACTTC AACTTCAATT TCAGCACTGT TATTTGGTA
85451 GTTTAATGAT TTAGAGTCAG TTGTTAATC TCTTAGAGAC TCAGTTACTT
85501 CATCAGCAAG GGTGTTACTA TAGTAAATACC TGCTAGACAT TATTATTATA
85551 TGGAGAGAGA GAGCTGGTA AGCTGTGACA TATACATTCT AGTTGGTGGT
85601 TGTTCTGTT GTTATTATTA ATAGTAACAA CAATAAAATAT CCTGTTGTT
85651 ATTTTTGTA AGTGTTCAGT GGCTGGTAAC TGAATTAGAG TGCCTGGAGA
85701 TATAGGTAAG GGTTTTGT TTTAATAATC ATTATCTTG TTCAAGAGAA
85751 TAGGAAAAAT ATAAGCCTCT TTTTAACCTT AATGCAAAAA AGTCTTTATA
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85851 TCTATTCTA CTAAAGCTA ATTAGAGAAG TAATTTAGG TAAGAGTATT
85901 ATGACCTGAT TTCTGATTA TTTAAGTATT ATTATACGTG TGTAAAGAA
85951 ATCCCTGAAG TGCTTATTG ATTATCTGTT GGTAGAATGA AAGGGTAACC
86001 AGCTGTAGTA AATAAAATTT TTGTCGAGG CAAAGCAAAG GAGAAGTAAT
86051 ATAGGAGAAA TTATTATAAT AAAGATGGGA GTGAGAGAAG AAACCTGGGT
86101 TCTAGTTCTT TCAGATAGGT GACCTGAAAC AAATCTCTTC CCTATACTTG
86151 GCCTCGGTT CCCCATCGGA ACAACCTAGG GCATACTCTA GATAATCCCT
86201 AAGGTCCCT TCAGCCTGAA CAAACATGAA GATTCTTACCG TTGACAAATAC
86251 TGAAACAGTG ATTAAGAGGG AGAGACACCC ACAAAAGAAAG AAATAGTTG
86301 TGCTGTCTC AAATGCTGAA CTGATAAAAA AGAGAACAGA CTCATAAAAC
86351 CCACTAATTG AAATTAATG GATAATTCTT GTTGATTTTG AGCTGGCAAT
86401 CTCAGGCTTC TAAATCACAA GGAAACCTCCA TTTGATCCTG CAATGGTCTC
86451 TTGGTCTCTT TCTTAGCTCA GTAGTGTCAA GCACAGAGGT TTCATGGAA
86501 TCAAGAGAGA AAGAGAGAGA GAGAGAGAGA GAGAGAGAGA CTCATGGAA
86551 AAAAGAAGAGA CAATATACTT GGATGAACTA AAGAGTGGTC CTCATGAAAG
86601 CCTCATAATG TCCATTGCTC ACCTGTTAA CCCTTGTGG CCTGATTTT
86651 GGTCCCTAAC TGAAATCAA TTAGTAGTC TTATGTAGGG AAATGAATAA
86701 CTTGTACACT GTTGTGTTT GCCATCTTTA GGACCACCAA AGGGTAACGA
86751 ATTCAAGCAGA CCCACAATCC GGCACCTTCAG GTTTTGAAA TTTACTCATG
86801 AAAATTAGG AAGTCTAA GGCTGTGAAA AATCATTGAA CTTCAATTGGC
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86901 AACCTAAAGA GGGAAACAGGG CTTTCCAGA GTCACCTGCC TTCCCAGGCA
86951 GAACTGGGAC TCGAACTCAC AGCTGACTA GAACCTCCACT GATTCCAAAT
87001 CCAGTATAAC CAAGTCTCT GTGCCCTTC CCATGATCTG GACCCAAAGA
87051 CTTCTGATG TTCCCCAAA GAGTTGTAGG TGCACCTCTG TCTCTGGTC
87101 TTGCACTGT AATGGCAGAA CTGAGGTTAG ATTCTCCTT GGATGTAAGG
87151 ATCACCGGCC CACCAGGCTG GCAGTAGAC AAGGGAGTGA TGGATTTGGG
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87251 CATGGAAAAG AATTACATTC ATCCTGAGCC CCAGCTACTG TTACCAATTG
87301 AAATTAGGAC AACATATTGAA TTAAGATACA GGTAGTTATG CTACCCCTAAG
87351 AACTGGAACTC TGAATACCTA CTTTTTATTCT ACTTTCTAC CCCTTGTAG
87401 TAACCTATTG TTGATCCACC ATTAACTTC TGTGAGCCTC AGTTCTCCA
87451 TCTTTAAGAC AGTGTGATA ATGACAGTAT CTGTAGAAC GCTTAACTTG
87501 AACTAAATGAA GAAAAACTAA ACAAAACACA TAGAATTAAG TATGAATTTC
87551 TGAGGTTAGT TTATACATGT TTTAAGAGCT TAGAGAAAAG GAAAAAAACAT
87601 AAGTATCTCA AGGAGATAG GAAATGTTTC CTTGGGGAGG TTGGAAAGCA
87651 GCTAAGCCTT GAAGAATAGG ATGTATTTTG AACACTGGGA GAAGAGATGA
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87751 GATTGTCCTA ATGCTATGGG CTCTCTACTT CAGTTAAGA AATATTCCAA
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87851 CTGAATTGTT CTCCTGCCA GGAGTGGGCC TACTTGTGA AATAAATCAC
87901 ATCACAGATA CCTCTTTCT TCTCTTTGT TAAAAGTTCT TTAAAAATAT
87951 ATATATTGTT AAAAATATAA AGGTTATCTC CAGATAATTG CCCAAATGAG
88001 TAGGCTTAGG CTTTAATCAT ATTATGTTCC CTTCTCTT GCTCTTCACT
88051 TGCCAAGTTA TACTAATGAT CATAATCTC TCTATGTGTT TTGGACTTTA
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88801 NNNNNNNNNN NNNNNNTAAC TCCAGCTTC GCAAGAGATCC CAAGGCACAG
88851 AAAGCAGGCA TACCCCTGCAA TCATTATCT CTGGGATGCC CTGGAGCCTG
88901 TCAAATGGAG ATAGGGACCA AGATGGTATG TTGTAATTT GTGATATAGA
88951 AAATCTGGTC AATTCCATG AAGCAAGGCC CTCACCCCTA TGGCTGCTTG
89001 TATAAGATAC TGCCCCCTT GTTACCCCTGT GTAGATAATG TTGTTGGAGT
89051 TCCCTCTTAA GTTGAGAAAA ATAGAATCCT TGCTCACTTC CATCCAAAG
89101 TCTGGATTTC AGAGGGATCA ATGCTTGGTT TGCAGGGAGA ATATGCAGAA
89151 CAAAGGAAGG ACCAGAAAAC TAGAAGTCAG AAGACCTAAC TTCAAGACCC
89201 AAGTTCAAAA CTTATAAAACT TAACTTATT ATTCAATTGAT TATGTATTGA
89251 TTCCTTACTC TGAGGCAGGC TTGCCCAGAC AGTGAGAACAA CAGTAGTGAG
89301 TAAGGGGAC AAGACACCTG ACTTCATGGA CCTTAGTTCA AGTGGGCTAA
89351 GAGAGAAAAA TTAAATAAT CAACTGAATA AGCAAGATAA TTGTAAGATA
89401 AAGATTCCCC AGGCACAGTG GCTCGCCCT GTAAATCCAG CACTTCGGAA
89451 GGCCAAGGCA GGCAGATCAC CTAAGGTAG GAGTCGAGA CTAGCCTGGC
89501 CAACATGACA AAACCCAGTC TCTACTAAAA ATACAACAAA TTAGCTGAGC
89551 ATCATGGTGC GTGCCTGTA TTCTAGCTAC TCAGGGAGGCT GAGGACATGA
89601 AAATCGCTTG AACCTAGGAG GCAGAGGTTG CAGTGAGCCA AGATCACACC
89651 ATTGCGCCCC AGCCTGAGCA GCAGAGGAG ACTCTGTCAA AAAAAAAA
89701 AAAAAAAA AATGAAAGTA AAGAAGAAAG AAAGAAAAGA AAAGGAGAAA
89751 GAAAACACGA TTCTCTGAAG AAAAAAGCAA TACACTGAGA GAAGGAAACA
89801 TGAGGTATT CGTTAAATA GTGGGTCAAGT GAATGCCCTT ACTGAGTAAA
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91301 TGCTTCAAGG TCACACTGTG AGTGTAGAG GAGTTGAAAC CAAGTCACAG
91351 AGCTCCCTAG TCTGTGCCA GCACCTGTGA TCAAGACCCC TCAGCTCCTG
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91651 AACCTCATAT GTAGCTGGTG ACTAAGGTGG ATGGAGATAA TGCACTAGAA
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92151 CTGGGATAAA GGATGAGAG ATACTTTGTA TTTGTAACA TTCTACTCAG
92201 ATGCAGGATG TTCATCTCAT TAATATTACA CTCTGGTGCC AGTTCTGGG
92251 GGGTCAGCTG CAGAGAACCT AGTTCAAGGCT GCAACATCTC ATTAGAACGCT

92301 GAAATTTGGA TTCAGGAAGA GGAGCATGGA GTGGGTGAGA GCCACTGTCT
92351 GCTGCTCAAG TTCTGCTGC TATCTGTATT CAGAGAGGCA CCCTGGTACC
92401 TTACGAGTGC TGCTCAGTGG GACGCTCTG ACTTTGATGT TGCACGTGTC
92451 AACATTCTAA TAGGGCAGCA GCGGAGATGG GGTATGAGTT TGGAAAGACA
92501 TCTTATGACA GCTTTTCCCT AAAGATGTTT CAAGAGATAA CCCTTAGAA
92551 ATAACGAAGG TAGTTTATGC ATTTCATAGG AAACCCACGG GCTTACGTAG
92601 CAGCTCACTT CGAACGTCGG CATGCCAGC GCTTCACTT GTCCCCGTTT
92651 TGCCCTCCCT GCACATCTGT GAGAAATCAT CACTGTAC AGTAACACAG
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92851 GGCTTCCAT CATGAATAGA ATCCAATGC CTAACACAAG CTGGATGGTA
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92951 CCCTTGCTCA CTGTGCTGA GCCACACTGG TCTCATTG TGCTCAAATA
93001 TGCCAAGTT TCTCCTACCT TAGGAGCTAC TATTAAGATA CCTAACTAAA
93051 GCTCTAAAGC TCTCATGCC TGACCAACTC TTTCTAAGA TATTCCTG
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93151 GTACTTCGCT GACCTTCCCC TTTGGCCCCA CTCTTACCCC TCTGTACATC
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107651 TGGCTGGCAT CCCAGAAAAG GCTGGGAATG ATTTAGACAG AGTGAAATGA
107701 GAGAGTCTT TAACCACACA GGGTATAACA AGTATGCATC TATTCTTTT
107751 GGAATGTTA AAAATTATCA AATCAGAAGC ATCTTAAAT TCACCTTTCT
107801 TTGAAAATG TATGCAAGAT CCAGCCACTT TATTTTTGTT CATATTGGT
107851 TTTCGGCTCT GTCCACATGT ACATTCAAA ATCCAACAAA CAATTCCATT
107901 GTTATACAT TGTGGCTTCC AGTCGACAAA ACCCCCTTTAT ACACTGGCTC
107951 ACTGATCCCC ACAGCAGGCC TGTGAAAGAG GCAGTTACAA CAGGTATTAC
108001 ATAGAGCTCC ATTTTGAGA TGGGAAATG GAGGCCCTG ATTTTCAGGA
108051 GGTTGCACAG GTACAAATGG GAGAGGTGGA TCTAGAACTC AGCACTCCTG
108101 ACTCCAAATC CAAGGCTCTG TTCATCAACT TGGAGCCCT GTTCTGACGC
108151 TGGAAAAGCT GGGTGGAGA GAGGCAGGAG AGATGGAGAC TCTAAAAC
108201 CAGTGTGTG GTTGTGTTAG TCTCTGGTGT CCTTACTCTC CCTTCTCAA
108251 TGAAATGTA TATCTCAGCC TTAGAGATTA AAATGGGTT CGAGTTATTC
108301 TCCCTCCTT TCCAGGAGA GGGGATTCTG CACCACTAAT CTTTGCTAGT
108351 TGAACAAGTT GTTAAATGAA AAATCATATT TGTTGCTAA AGCTGGTCCC
108401 ACCGGCAAGC CGGTGCTAGT GCCACTCAGC TGTACATACAG GCTGATGGG
108451 CAGGCAAGAG GTGGACGTAG GGTCTCTGGG AATGGTCTGA GCTCACCGG
108501 TCCCCGTGGCC TCCCCAGGCA TTCTGCACAC TTGGCTGTCT GCAGCCTCCT
108551 CTGCTAGGAA TGAAGCAGAG AGAGCAAGCA AACACCACCA GGAAAGCTTC
108601 TTAAAGGTCC TTTGAAGGGT TCACCTGCG GGAGACTGAC GGTTTTGAAC
108651 ATTTCACTGC TGAGCAGCCT TAAGCCCTGT TTGAAGGGG CGCTTTGTC
108701 AATGAAAATT TGGTCCTTAG AACTCACTT CCTCTTTTC CTTTGATAC
108751 TTCAACTCTT AGTACGTTCA GGGACTACCT GAATATGAAT TGTTTATTGA
108801 GACTTCAGA GGCAGGATCT CTGAAGGTCT GTGCCATGGA TCCTGCACCC
108851 CATTTCGCAA TTTTGATGT TATTCTCTT TCTAGGTTTGG TGGCCAATT
108901 AGGGATCAC AAATCTTT TCAAGAACCTC AGGTTCTATA GGCAGACTGC
108951 CAGGGTTGTG ATTCTGGTTG CTTCATTTCATCTATGTG GCCTCAGACC
109001 AGTTATTTAA AGCCTAGGAG CCTCACTTTT CTCACTAAAAA AAGAAGCAAT
109051 GAGTTCTTGC TTCAGAGGAT GATTGAGTAT TCAGTGAGAT AATGCAATGG
109101 TCCCTAGTAC ATAGAACGAC TCTTAAATAA TTAACATTAG TTTTACCTAT
109151 TATTGAATAA ACTTTGCTAT TTCTGAGTGC CAAAGGAAAT ACCAAGATGG
109201 CTAAAAAACC ATACTTGCCC TCAAGAAAAT CACAGTCTAG CTGGGTCCAG
109251 TGGCTTATGC CTGTAATTCC AGCACTTTGG GAGATAAAAT CAGGAGAATT
109301 ACTTACACCT AGGAGTCAA GACAAGGCTG GGCAACATGG CAAGACCCCG
109351 TCTCTAAAAA AAAAAAAAATTAATTAGC CTGGTGTCTGT GGCATGTACCC
109401 TGTAGTCCCA TCTACTCAGG AGGCTGAGTT GGGAGGATTG CTTGAGCCTA
109451 GGAGGTCAAG GCTGCAGTAA GCCATGTTCA TGCCACTACA TTCCAGCCTG
109501 GGTGACAAGG TGAAACTCAG TCTCAAAAG AAGAAGATCA CAGTTTAGAA
109551 GCAGATCTAG AGAAATGACAT CTAAATAACA GATTACATAT ATAATGACCA
109601 TTGTATAAT GTGATTATG ATGTATAATG ATTATATATA GTGGATATT
109651 TATATAATAA TATACATCA CATGTTATTA TATATTATGG CAATTATATA
109701 TATAATCAA TATACTAAGT CTTGTCAAAG TAGTATACCTC AAACACTTG
109751 GGGGAGGGAG AATGCAAGAA TAGGAAGAGC ACATCCTGTC AGTGCTGTTA
109801 CCTTTGATTT GATTCTGATG GTTTCAGAAA GGAAGCACCT GACTGGGTT
109851 AGTTAAATTA TGGGTTGAGT TTAGTACCTA TTAGAGGAAA GGGAAAATA
109901 AAAGCAAAGA GACTAGCACC AAATAAAAG TATATTTTAG GAACACCAGA
109951 CAATCCATT GCAGTTACAC AGGGGAAAAA GTAAGAAAAA TATAATGAT
110001 AAGGTGGAAA AGCAGTTAT GCTTAGAATC TGAAAGCCT TGAATGCCA

110051 GCAGCAGAGG TGAGGGAGG ACTCAGATCC TAAGGTGGTC TCGTGGAGAA
 110101 CTGAGTTGA CAATCTACT TATTAGCCTC CCTTAACATGC CTTCCCTAAC
 110151 TGCCCTTGA TCTGTATTTT CTTCTTAGGA ATTCTTGTT TCTTCCTTTC
 110201 CTTATAGCCA ATATTTATTG GGCTCTTGAG TTATGATAT GGTCCACTGA
 110251 AAATCTACAA TCTATCTGTC CAATGATACT TTAACAGAAT AAAATGAAGG
 110301 TTAAACCACG GCAGCTTTTC TCACTAACAT TCAATAATT AGGTTAATA
 110351 AAGCTTCCGT GGAGTGGGGC TATTGTTTGA AGGTTTTTA TTGTATTTA
 110401 TTTTATTTGA GACAGAATCT CTCTGTGTCA CCCAGGCTGG AGTACAGTGG
 110451 CACAATCTCG GCTCACCGCA AGCTCCACCT CCCAGGTTCA TGCCATTCTC
 110501 CTGCCTCAGC CTCCCGAGCA GCTGGAACGT CAGGCGCCCG CCACCACGCC
 110551 TGGTAGTTT TTTGTATTG TTAGTAGAGA TGGGGTTCA CCCTGTTAGC
 110601 CAGGATGGTC TCGATCTCCT GACCTCATGA TCCACCCACC TCAGCCCTGCC
 110651 AAAGTGCTGG GATTACAGGC ATGAGGCCACT GTACCCGGCC AGGGCTGTTG
 110701 ATTTTATATA ATTTCTTCC TTTTGCGT ATGAAAGTCC ATTGCTAATT
 110751 CTAGTTGAC ATACCTTATT ACCTCAACTA GATTATTTG TCCAGAAAGT
 110801 TTACTGAGCA TCTTCTAGGC TAAGCACTTT AGAAAAGTATG AAAGAAGTTT
 110851 AATTACAAAT ACTTATCCTA AAAGATCACA ATCTTGCTGA TGGCACTTAG
 110901 ACAGTACAGC AATCCCTTGA TATCCACAGG GGTTTGGTAC CAGGACTCCT
 110951 ACAGATACCA ACATCTAGGT ATGTTTAAGT CCTTTATATA ACATGGCGTG
 111001 GTGTTGCAC ATAACCTAGG CACATCCTC CACATACTTT AAATCATCTC
 111051 TATATTACTT ATAATACCTA ATACAAATGTA AATACTATGT AAATAGCTGC
 111101 CACACTTAT TATTTTGATT GTTATGTTGT TAATTTTATT TTTAATATT
 111151 TCAATCTGCA GTTCTGAATC TGCAACAGTA GAACCCACAG ATACAGAGG
 111201 GCAAATGTAC TCAAATTATT TGAGAGTGGT GCAAGCCCGC CAGTGAGTT
 111251 GTCACCAGTT GAGAAGACTT AAACGACTAA CTCTATAATA TAGAGATT
 111301 TTCTGGGGC TCAGGAAGGG CCAAGATCAT AGATAGTTA AGATCCAGAG
 111351 AAAATGGGAC TTGAAAGTAA ATGAGGGAG GGGAAAAGAA AAATGTCCT
 111401 GAGAAATAGC ATAAGTAAAAA GTCTGAGGT ACATGGTGGA GTCACAGGG
 111451 AAAGGAGAA GGCTGCGGC TTGACTAAAG TGTGTCAGG GAGATGAAAGC
 111501 CAGCTAGATA AGGTGGACAC GGAGGCACTG CGCACCTTGT TGCCAAATAG
 111551 CGCCGGTCGT CAGAGAGTCT ACAGTGAGAG CCATCTCTTC CTGTTGTA
 111601 TAGAAGTATG GAGTCTGGAC CGGGCGCGGT GGCTCACGCT TGTAACTCCA
 111651 GCACTTCGG AGGCGGAGGC GGTTGGATCG CGAGGTCAGA AGATTGAGAC
 111701 CATCTGGCT AACATGGTGA AACACTGTCT CTTACTAAAAA TACAAAAAAA
 111751 CTAGCTGGC GTGTTGGCGG GGCGCTGTAG TCCCAGATAC TCGGGAGGCT
 111801 GAGGAGCAG AATGGCTGA ACCCAGGAGG CGGAGTTTGC AGTGAGCCGA
 111851 GATCGCGCCG CTGCACTCCA GCCTGGGGCA CAGAGCGAGA CTCCATCTCA
 111901 AAAAAAAAAA AAAAAAAAAA AAAAGTATGG AGTTTGTAAAG GATAGGTTT
 111951 CAATCAGTAG AAAAAGAGAA ATGCCCTCAA ATCCAGAATT TATTTAGAA
 112001 AGAAATAGCG CTTTCCACC CAGGTTTTG ACTGTGGAAA GTCAAAGGAG
 112051 GCACCTGAAA TTTCAGACCA CTATACCCAA AGCACCTACA TACATAGAAA
 112101 ATGCTGATCT CAAGCTTCAG AGTAAAAAAAT GAACATCCCA GGGAGACCAA
 112151 AGAGGAGAAG TGCTGTCTG TTTCTGCCA GGCTGGGGGG CCAAAGGGAA
 112201 ACTGGGAGAAG GAACGAGAGA CACCTCTACC ACCATGGAAC CTTGCTGCTA
 112251 AAAATTGATT TCAGAGTTTC CTTATGTCTC ACAGCCTGGG AACTTGAATT
 112301 AAATGAGCTT TGCAAGAGA TTGCAACCC AAAAGACCTG GGAGGGTAAG
 112351 CCTCTCTTTT ATTTCAAGTT TAACTGTAGC TTCAGCTGTC AGAGCAGCAT
 112401 CACATCTGG GATCCACCT GGAGCATCTC ACCCTCGGGG CACTCTTTA
 112451 TCTCATGAGG AAGGTGGAG TCTGAGCTGA TCAGATGCTT GATGATGAAAG
 112501 TGGATTCTC CTGAGGTTAGA AACTCCTCT CACTGGAAGT TTTCAAGTAG
 112551 AGGACCACTT TGCAAGGACA TTGTCAGAA AATTCAATTCA TTCGCTGGAT
 112601 GAACAGAAATG ATGATAAAACA GCTAACACCG ACTGAGCACA TGCTGGGCC
 112651 AGACCTGTG TTTAGCACTT TAAGTATTTT GCTTCCTATG TCTCCATGAG
 112701 ATAAGAGATG CTGTTACCC CATTTCACAA GCAAGAAGCC AAAACCTCAA
 112751 AGAGTTGGA ATCTTACCA AGATCTCATA ACTCATAAGT GGTAATATT
 112801 TAAACCAAGT CTGCTGTATT CTGTCATCCA TATTCTTACT TTTTAACTTC
 112851 TTATTTCCAG AAAAGTCAC TAAAGCCCCAC ATACTTCACA AAGAGACTTT
 112901 TTTTAATATC TTACACCCCT GCTGTTTTAT AATCTCACTG CTAAAGATGA
 112951 AGGCATTTT GGTTCTGAC CTTTGCTGG GACATGAAGG TCTTGGGATT
 113001 AAGGTTCTA TACTCTCACA TGTGTGAGTT TCATGTCCTC AGTGGCCATG
 113051 TCTAAAGCA AAAGTGAAGG TTAATCAGA GCGGAAAACA CCTCTCTATT
 113101 CAACACCGA TTGTTAGGGC TGAGCTGAAA AGCTCCTAAG TAAACTAGTT
 113151 CATGGCCAAG TGGCCAGAGA ACAAAATTCTA GGAGCCTGAA ATGTGAGATG
 113201 GGAGAGCCAG TTTGCAACCC CACCTGTTTC ACAGGATGAT TTCAGGCAGG
 113251 TTCCCTTAGAT GACTGAAGTT TTGAAATTGT AAGGGACCTT AGAGAGTCCT
 113301 AATGCGAGATT GTTATCAATT ATGCTGTACA GAATTATAGA GTTCACAACT
 113351 TATTCTGCAA ATATTCAATT TGAACCTGCT ATGTGCCTAG TATTGGCCAG
 113401 GAGATGCCCTC CAGGGCTGCT AGAAAGGAGA AGGAGGAACAA ATAGGACAAA
 113451 GTTGTCTCT CATCCTCACT TCTTTAGCTG TGCCCTCCAT TGTCTGTGTC
 113501 ATGTCAGCAT TGCAAGTTAA ACTTATTTG AAAAGGACAC TATATACCAA
 113551 AGGACTATAA ATCATGCTGC TATAAAGACA CATGCACACT TATGTTTATT

113601 GCAGCACTAT TCACAATAGC AAAGACTTGG AACCAACCCA AATGTCCAAC
113651 AATGATAGAC TGGATTAAGA AAATGTGGCA CATATACACC ATGGAATACT
113701 ATGCAGCCTT AAAAATGAT GAGTCATGT CCTTGTAGA GACATGGATG
113751 AAATTGGAAA TCATCATTCT CAGTAAACTA TCGCAAGGAC AAAAACCAA
113801 ACACTGCATG TTCTCACTCA TAGTTGGAA TTGAACAAATG AGAACACATG
113851 GACACAGGAA GGGGAACATC ACACACTGGG GCCTGTTGTG GGGTGGGGGG
113901 AGTGGGGAGG GATAAGCATT AGGAGATATA CCTAATGCTA AATGACGAGT
113951 TAATGGGTGC AGCACACCG CATGGCACAT GTATACATAT GTAACTAAC
114001 TGACACATTGT GCACATGTAC CCTATAACTT AAAGTATAAT AATAAAAAA
114051 TAAAAGAAAA TAAAATAAGA AAAAGACACT ATATAGCTTG AATTGCTCTT
114101 AGACAGCAAT GTTCTATTCT AACACTCCCC TTGATAGAT GATGAAGCCA
114151 AAAAGATAA AGTAATTGTC CCAAAGTCCA GCCATCGTTG CTAGCTAGTT
114201 GCCACTTTAC CCCAGTACCT CCTACAGCCC TGGGCTACAG TTCCACATC
114251 TCTACGATGG AGGAAGGGGA ACAGACTCTC TCTAGCAGTC TTTTCCAAGG
114301 CCAAAGTGT TTCATTCTC GAATTCTTG AACATCCACT GTTGGCCAG
114351 TATTGTCCTT AGCTATCTAA TAGTCACAAC CCTTAAGTTC TTTTCTTCT
114401 GTCCCTCGTG CCCTTGTCT TCAGGCTGGT AAAGTGTCA AGATATTGAT
114451 CTGAGCTTG TTTAACATG CTAAGCTTAT ACCATGGGTC CCAGGGAAAC
114501 TAGGAAGATG AACAGTATAT ACAATTACA ATTAACTTGT CATTAGCAT
114551 TAGGTATATC TCCTAATGCT ATCCCTCCCC TGCCCCCA CCCCACAACA
114601 GTCCCCAGAG TGTGATGTT CCCTTCTGT GTCCATGTGT TCTCATTTGT
114651 CAATTCCCAC CTATGAGTGA GAACATGCAAG TTTGGTTTT TTTGTTTTG
114701 TGATAGTTA CTGAGAATGA TGATTCCAA TTTCATCCAT GTCCCTACAA
114751 AGGACATGAA CTCATCATTT TTTAAGGCTG CATAGTATT CATGGTGTAT
114801 ATGTGCCACA TTTCTTAAT CCAGTCTATC ATTGTTGGAC ATTTGGGTTG
114851 GTTCCAAGTC TTTGCTATTG TGAATAGTGC CACAATAAAC ATAACGTG
114901 CATGTGCTT TATAGCAGCA TGATTTATAG CCCTTGGCT ATATAACCCAG
114951 TAATGGGATG GCTGGGTCAT ATGGTATTTC TAGTTCTAGA TCCCTGAGGA
115001 ATCGCCACAT GTGCCCTAAA ACTTAAAGTA TATAATAAT TAAAAAA
115051 CAGTTACCAAG TATTATTGTA GTGCTTAAGG TAGTAAAGGC TTGAGAAGCT
115101 GGAGCCTATT TTCATACCGA ATATGTAAT ATCGACATCT CTGCTCTAGA
115151 AGATCTAGGA CACTCTGGAA AAGTGTCTGT ATATCTTATA TTAGGAGTAG
115201 TGGCCTCACC AATGTGGTGT CATGGTTAGT AAAGGACAGG CTGAGTGAAC
115251 AAGGAAGGGAC TGATCATGTC TTTGCCAGT GCCACCGCCT AGCTACGTT
115301 TTGGCCTGG GACCTAATTG GTCCAGCCTC AACTTCTAC TGTGTGACAG
115351 GTCCAATAAT TCCCCATACC ACAGGGATGT TGTGATGATT AAATGATAAG
115401 CAGAGATTG AGTACAGGGAT TGGATATATA GTAAGCTCTC CATAAATGGT
115451 AATACTATTA CTATACATAT ACATGTATT TACATACCTA TATATATT
115501 CATACTTTA TGATCTAGTT TATAATCTCC AATATGCCTT GGAAGCTTC
115551 GAATGAGTCT TATTCATTT TTGTAATGTT ACTATCATAAC ACAGCAATAA
115601 CAGAACAAAG TTCTAAATT TCTCCCTGGA GCCTTACTTC AGGAGTTTG
115651 TACCAATTAG AGGGGGGGGG GGAAGAGGAA GAGATGGGAG AAAGAGAAATT
115701 TCACCTGTT TAGTCTCTAT ATACAAATAA AGTGGGTGAC CCCTAACTTT
115751 GCCAAAGCTC TGCTCAGAA TGAAACCACA CCCAGTGCCT GTAACTTCT
115801 AATCAAACAC GTGAGTTTAC TTCAAGGGTT ACAAATCAT AGTTCATGGA
115851 TGAAATATGT GTGGCCAAA CAGAATTCTA ATTGTTAAA AAAAACAGT
115901 GCTAACCTT CAAAATACAA GAATTTCATT TGAAAATCTA GGTTTCTGTC
115951 TTCTCACTTA CTTTAACTT TCTTAATCTG ACTTACATAC TCAAGGCAA
116001 ACTATATGC ACACTTTT ATCACAAGG TAACACTCAG CCAAGTCAAG
116051 AATTGTCAGCG TTGTCAGGCC CCAGGAATGC TCTTGTGCC ATCCCTAGCT
116101 CTATACACTG TCTCTCCAAA CAGAACCTCT ATCGGGATTG ATCATAACAT
116151 CCTTGTGTTT CTTTAGAACT TTACCCACCTA AGCATGCATT TCTAAATGTT
116201 AGAGTTAAT TTGTCATCA TTTTGAATT CAGAATATAC TCCGTACCTC
116251 ACGGTAGGAA AAATCTCTT AAACAAAATA TAAAACCATC CATAAGGAAG
116301 AACTGATAA ATTGAACCTGT ATTAAGGTTA ACAGTTCTG TCCTTATAAAG
116351 CAGGAGATAC CATTAAAGAGA GTGAAAATGC AAGCTACAGA AAGGAACACT
116401 CACATTAGA ATACCTAAAAA TCAGTTAAA AAGAGGAGAG ACAACCAAGT
116451 AGAAAACAG GCAAAAGGTG GCCAGGCGCA GTGGTCAGGA ATTTGAGACC
116501 AGCCTGACCA ACACGGCAA ACCCGTCTC TACTAAATAT AAAAAAATTA
116551 GCCAGGCTG GTGGTGCACA CCTGTAATCC CAGCTACTAG GGAGGCTGAG
116601 ACAGGAGAAT CGCTTGAGCC CAGGATGTGG AGGTTGCAGT GAGCCAAGAT
116651 TGCACCACTG CACTCCAGGC TGGGTGACAG AGTGAGACTC TGTCTAAAAA
116701 AAAAAAAAGAGATGAGCT ATTAACACTT AAAAAGGCAC ATCAACATT
116751 CAATAAGCAT CCAGTATGTA TTATGTGTG TATCTGTTA CGTTTGCTTA
116801 ATATAACACT CATTAGGATTG ATCCTCATGA TTGATGAGATAG GTGAGTTA
116851 CTCATTTCA TTCTGTATA GGATTCTATT GTATGAGTAT GCCAAATT
116901 ATTCACTCCAT AATTCTACTC TTGATGGACA TTGGGCCGT TTACACTTT
116951 GAATAATGAG TCTATAATAA TTCTGTATA TGTTGCTGGG TGCACATGTG
117001 CACATTTT TTGTTGGATA TAAACCTGGG AGTGTATGTT GAATGTTCA
117051 CTTAAATAGA TACTGCCAA TAGTTTCA AAGTAGCTGT ACCAAATTAC
117101 ACTCCCCACCA TCAATATGTG ACAATTCCCCA TTGCTCCAAA TTCTCTCAA

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117151 CACTTGGGAT TGTAAGTCAT TTTAATTGTA GCCCTCTGG TGGGGGTGTA
 117201 GTGATAACTC ATTGTGATTT TAATTGATAT TTCTCTTGAT TATTTGTGAG
 117251 TTTAACTTC ATTTCATGTG CTTATTGAAA TGCTGATATG CTTTTTTAAC
 117301 TGATAACAGT TAATACCTTT TTTAAAATT GATTTTAGGT ATTCTAAATG
 117351 TGAGCCTTC ACAAATGTG TATGGTGC AAATCTTCTT CCTTTCCATA
 117401 GCTTGCATTT TCACCTCTT AATGGTATCT CTGCTGTGC AGGACAGAAA
 117451 CTGTTAACCT GAATGCACTG CAATTATCA GTTCTTCCTT TATGGATGGT
 117501 TTTATTTTGT GTTGTAGAAA ACTTTCCCTA CCTGAGATC AGGAATATAT
 117551 TCTTCTATAT TAACTTTGG TGGCCTTATG TTTTCCACT TAAATTAATG
 117601 ATCCATCTGG TACTGATTT TATTAGGGT ATAGTATAGG GGTCTAGAAT
 117651 CAATTTCT ACATAGATAT CCAGTTGTCA GCATCATTTA TTGAAAAGAT
 117701 CACCTTTCT CCACTAAACT TCAGTGGCAT CTGGTCATA AATCAAGTGA
 117751 CCAAGTATGT CTGGTCTGTC TTCTGGTCTT TCTTTCTGT TCCACTGGTT
 117801 TGTTTATTC TCAGGACTCT AGATTTAAC TGAGCCTTTG TATCTGGAAC
 117851 AGGAAGCTT TCCCCTTTT CAAAATTGTT TTGGCTATTA TTAGACCTT
 117901 ACATTTACAT ACAAAATTAA GAACCAAGCAT GTCACATTCC AAATAAAACC
 117951 TACAGAAAATT CTAATTGGGA TATAATTAA TTACAATCAG TTTGGGAGAG
 118001 TTGATATCTT TACAATATTG AGTCTTCAAA TCCCAGAGCA TAGTATATTG
 118051 CTTCAATTAT TAAGATCTTC TTTTATTGTT TTCAGTAATA TTTTGTAGTT
 118101 TTCAGTACAG ATCTTTGTG AGATTTATTT TGAGGTATT CAATGTTTT
 118151 TGATATTATA AAAAGTGTG TTAAAATATT ATGTCATAAT TGTGCGC
 118201 TGGTAAATGG AAATACAAAT GATTAATTAA TATTGATT TATGCTCGT
 118251 GACCTTGCTA AATTCACTTT TTTCAGT TTTCTTCTGT GTGAATACAG
 118301 TCATGTCAATT TATGGGTAAT GAGAGTATTA TTTTTCCTT GCCAACTTGA
 118351 CCATAATATC TCCTTATTCA GTTGTGTTAGT ACCTTAAGAT GTTTTCATC
 118401 CTGATTATGA AATAATAAAG TATGTGTAAT TTCTTTCT TACAATACCC
 118451 TTGTTCAATT TGGTATTCAG GTTATGCTGA CCTCAGGAGG AAAATAAGGC
 118501 AGTGCTCCCT CTTCCCATT TTTAAAGAA TGATATAAAC ATATCACAAA
 118551 AGATATATAT ATATATATAT ATATATATAT AATCACAGTT TCTTTATCCA
 118601 CTCGTTGATT GATGGGCATT TGCAATTGGTT TCACATTGTT GCAATTGTA
 118651 ATTGTGCCGC TATAACATGC ATGTGCAAGT ATCTTTCTA TATAATGACT
 118701 TGTTTCCCTC TGGGTAGATT TATAATCTCA CCTCTATAC TATTGACATT
 118751 GGTGGATT TTGCTTGGTT GCTCTCATAT TTCTCTCAA ATTATTGAGG
 118801 GGTTGGTTT GACTTTGTTT ATCTGTGCTA TTGTACATT ATTTCATTAA
 118851 CTTCTACACT TTATTACTT CTCTTTCT ATGTTAATT TGCAGGGCTT
 118901 TTTCTGACT CTTAAATATG GATGCTTGGT TCATTGATT TTTCTATAC
 118951 TTTCTCTT TTCAATATA TGCAATTGTA AAGCCTTGCA TTTCTCTCA
 119001 AAGATAGACT TAACCACATC ACTATTTCT TGCTTGTGTT CAGATTTACT
 119051 AAATTTAAA TTTTTTGAC TTTTACTCC TGTTAATT TGAATATTAG
 119101 GCACCCCTTA ACTGTTCTTC TAGTGCTTAC ACTGATGATT GCAACATTCA
 119151 TTCTTGGCAT ATCAAATGTT ATTGTAATTG CCACTTACAC CCTTTTCCCA
 119201 GATGGTACAA AGACATGAA TACTTAGTT TATTATTTA ACTGCTAATG
 119251 TACATGTTAT TATTGTCGA TAATTATTTAT ATTTTACAG TCGACAATAT
 119301 GGTTATTG TTGTTGCTGC TCTTTTATTG AGTCAGCATT ATTATATT
 119351 ACCCATATAT TTATAATTAA TATTACCTTT TATTCTATT GTTATCTCAA
 119401 AGTTTCCATC TGGAAATAATT TTCCCTCTT GTGAATAATA TCATTCTGTA
 119451 TTTCATTAG TGTGGGCTG TTGTTGACAA TTTTTTTCT TTTCTTTGC
 119501 ATCAAAATGT CTTTATTTA CATTCTCTAT GGAAAAAAAG TTTTGTGGA
 119551 TATGTAGCT ACATCACAGT TATTCTCTGT CAGCAGTTA AAGATGTAAT
 119601 TTAGTGTGTT CTTGTGAAAGG GTCAAGCTGTC TGCTTTATTG TTGATCTTT
 119651 GACAGTAATC TGCTGCCCT TGCCCCACTT CCAGGTACAG AGTTACTGTC
 119701 TTGGTTTTC AGCAATTGTT CAATATTCTG GTTAGTTGCG ATTCTTTTT
 119751 TTAATTTAAC ATCATTGGG TACATTGGAC TTCTCAAATT TGTGCTTGA
 119801 TGCTTTTGT CAGGTTGGA GAGCTTTGG CAATTAAATT TTCAGACATC
 119851 ATTTATGTT CTTCTTTTTC TCACTTTATG AAATTTATT TACAATGATG
 119901 TTAAGGTGTT TCACTGTAAAC CCACATTCTT TTCCATATT TCTATCATT
 119951 TCTCTTATAA TGTTCAATC CTGTTATATT CTCTGTATCT ATCTTGATGT
 120001 TTGCTAATTC TCTTTTGGC TGCAACCTAAT CGCCATTGT TCCTGCTTAT
 120051 TGAATTTAG ATGCCAGTCA TTACTGTT CAATTGGA AAATTTTCG
 120101 TGGTCTTTC ACATGGTTT CAGCCTCTG ATAAAATTAT CAATCCTCA
 120151 TTTAAATCTCC TGGGAGATAG TAAGCATAGT TGATTATGAA ATTTATGCT
 120201 GTAATGTCG ATTACTCTAT TATCTTGAGC CCCTGTGGGT CTATTCTTAT
 120251 TTCTCTGCT TTGTTAATTG TGTTGCTTA TCTTCTGTA
 120301 TAACAGTTT TTTTACTGC GTTCTGGACA TTGAATTGCA AAAATTCTT
 120351 TGCAGAAATA ATTGAGGCC TAAGCTGATG TTATCTTTT CCCTAGTAGA
 120401 TATATGTTG CTTGCTGCAC TAGTACTCCA TTATCAGGTC AATCCAATT
 120451 CAGGGATTGA GATGATTGAGT ACCTACACTG CAACCCCTAC TAGTACCTGT
 120501 CTATTCCAG TTCAGCTTA CTCCATTGG GCAGCCCTTC TGAGTCCAG
 120551 CCTAAAGTGT GGTTAACAA GCTTCCCCCA CTGCAATCAC CATATTTGG
 120601 TCCCTGGACTC CAAATTTCAT CTTCTATTT CTGGCAAGCT CTTAAATGAG
 120651 CTTCCCTTA GTTGTGTTAGT TGCTTACTCT AGAATTAGTA AATATCCCCA

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120701 AGGTGCAAGC AGCTCCAAAC ACAAAGGTTA CCTCCCGGGC TTCCCTCACAT
 120751 CTTAGATCCC AGCCCTGCTA TTCTTGCTC TTTTGTAGC TCTCCTACAT
 120801 CTTCAAGTAG ATTTGTAAT ATTTGCCCA GCTTTCTTG TTGTTCTCAT
 120851 TGGGAGTATT CGTCCAAATT ACATAGTCTT TCATTAACAC AAGAGGAAGT
 120901 CCTGTTCCCGT ATCTTGAAAA AAATGATAGA TATGTCCACA ATAGGCTGAA
 120951 ACAAGGCAGT GATTTCTCCC TTCATATGAG GAATACATTC TCCCACAATG
 121001 TCCAGCTAGC CTCCCTCTCA TTCACCTTAG CCCAGTGACT TTGGCATTG
 121051 GGATTAGCAG TCTTTCTT TTTTTTTTT TGAGATGGAG
 121101 TCTTGCTCTG TCACCCAGGC TGGAGTGCAG TGAGGAAATC TTGGCTCACT
 121151 GCAGGCTCCA CCTTCCGGGT TCAGGTCTT CTCCTGCCTC AGCCTCCGA
 121201 GTAGCTGGGA TTACATGGCC CACCACCA CCCAGCTAAT TTTTGTATT
 121251 TTAGTAGAGA CGAGGTTTCA CCATGTTAGC CAGGATGGTC TCGATCTCCT
 121301 GACCTTGTGA TCTGCCGGCC TCGGCCCTCCC AAAGTGTGG GATTACAGGC
 121351 ATGAGCCACC GAGCCCAAGC CAGACTCTT TCTTAAATAT TCCAATAAGG
 121401 TACAATTGTA TCATCTTAGG TTTCTTCTT CTAAGTCTGG CATGATATGG
 121451 TTGTTAAATG GAGGTTAACT ATTTTATTAT TTGCTAGAG AAGAACTCCT
 121501 AAAGCCCCTA TGGGGTTGGC ATCATTCTAC TGTCATGCATG CCTGGAAAGAT
 121551 CTAAAATATT TAGTGGGCC AGAACCTCTC TATGAGGACA GATTGCCAGA
 121601 CTGCTTGTCA CTGCAGAGCC TTTCAATGGA AAACCTGGATT TCTAGCCTCA
 121651 GTTGTGATGT GAGACCAAGG CAGTGTGAA TGAGGACTAA AAATAGGGTG
 121701 ACTTACAAAC AGATAGTGTG TATCTCCAG GGAGTGTGAA GTCCACTTTC
 121751 CAAAGCAACT GCCAGCATAA GGAGTGTAA TGCCCTCTGG GATCCAAGTA
 121801 GGATGAAAAC AAACACAGA AAATGAGGTA GGATGTTCAA CTCTCCCTT
 121851 CAGTGATCAG GAAATCTACA TGCTCATAGA CTGGATTATT CAGAATAGAC
 121901 CTTGTTGAAA GTTACTGGAA TGAGGAAAAA CCCTACAAAG ATTTCCAGAT
 121951 TCCCTGGGA AGACAAAAGT ATTTGGTCTT TGGTGTATC GTTGTGTTG
 122001 TTAAAGTGA ACTCCTGTCC TTTGCTCTAA TTCAAGGAAG AATTTCTGAG
 122051 TATAGCTACT CTATGCAAA TAATCTCTC CTTAGGGCT TCCCCTAATT
 122101 GTGGTCGAGA GTGAGTCTC CAGAGTCAG ATGCCTAGAT TTCAATCCTT
 122151 ATTCTACTAT TTATTAGCAT TGTAACCTTG GGCAAGTTAT CTAATTCTC
 122201 TATCTGCAA TTCCCCATT TATAAAATGG AAGTAAAAGT GCTACTTTAT
 122251 CTCCAAGGGT TTTTGTGAGG ATTTAAAAAA GTCACTGCATA TAAAGTATCT
 122301 AGAACAGTGT CTGGCACATG GAAAAACTCA AATAAAAATA GCTATTATA
 122351 ATTAATTGTT TTTTAGTATT ATAATTGTAT AGTAATGCTC AACACGTTA
 122401 TCGTGTGCT CTCAAAGCCC TGGAGTTCTT ATCTCAGTTC TGCACTCTT
 122451 CATTAAAGT TCTGAACAGG CTGTCCTCAA CCTGGTGGAT GGTTCAAACAA
 122501 GGCTGTCCAA CTTTCTTAGT TGGATATGGG GATTTCCAAA TCTTGCTGCT
 122551 CATTTCAGAA AGCTTTGAA AAATATAGAC TCCTAGGATT TGCCCACAGA
 122601 GATTCTGATT TAGTAGATT GGAGTGAGGC CTAGGAAGCT ATATTTAAA
 122651 AAGCTTGCCTA CTACGTATAA TATGCAACCA ATTGGAATG ACTGAACAT
 122701 GATGACCTGG TACCAATTAT TAAATATATG GAGCCAATTA TTAAATATTC
 122751 ATAAATTGTT CAAACTGATT GTTAAACCAT TAGTAGTT TAGCTATGGT
 122801 AGGAATATTACACCATGGA AACTGGCAAAT TCCTACATTCTT TTTTTCCCT
 122851 GGAAAGCTGG TTCTACTGTCC CACCACTGGC ACAATCTCT TAGCCCTGG
 122901 GATCTGGAGT ATCTCTGTCT GAATCTCCTT TGGTTAGAAC TTTACATCTC
 122951 CATGATTTC TGTTCTCTAA TTGAGGTTTT GATCTGCCAG GCAGTAGATA
 123001 TTCCGTGAC TGAAAGGGCT TCCAGCTAGA TATCTCTGCA GCCATAATCA
 123051 AGCTCTCCAT CATTGCTTTG TTTTGAGGCA GAGGTGGAAA ACTGGTGTCTC
 123101 AGTGTGATT CTGGTCTCACAA GATGCATAAT TGGTGGCTCT CACGAAGACT
 123151 TAAAATTAAA GTCGGAGGCA GCTTTTAAA AAATTATAAG ATGGCATATA
 123201 AAAATCCAGA TTCTCACCTT CTCTTCAA AAAACAAACAA ACAAAACAAA
 123251 ACTAAGTTGA AAGAAGATCT GGACCTGCTT TTCAGTGGAC AAAGTTCAGC
 123301 CAAAGCTACG TGAGCACTGG CAGGGGAAAG GTGTTCTCTC ACCGGCTCAT
 123351 TTGTTCTT ATGTTTCCG CCTGCCCTTG AGCTTGCAGC TCCTCTGGGA
 123401 AGCACTGTGT TCTGTGGAA AAGGTGCCAG ACTGGGTCTT TGGAGATGTA
 123451 GTTTGTAAAT CATGACTCTG TTTTTAATT TATCGTGTGA CCTTGTTCAA
 123501 GTCAATTCTC CTAACAGAGC CTCAGTTCT CACCTGCAAAT CTAGGGAGAA
 123551 TGCTTGCTT GTCTGCTCT CCAAATGTGA GATGGGGAAA TGTGAGTCT
 123601 TGACCACCAAG CTGTAGAAAAA GTAAGGAATT ATTGCTAAAT ATTGATTCT
 123651 ATTTCTGCC ATTGGCACCT AGGTGGGAAT GAATAATCCC AGAACAGGTT
 123701 CTGATAGGAG AAAATATTG AATAGATAGG AGTGCTGAGA AGGGATAAGG
 123751 AGAGAGTGCC TATAATGAGA AAAGTGCACA AACACAGAAAT ACTAGTGAAT
 123801 ATGCTGAATC TACAGCTTC TTAAGGGAAA TTGGGAACA TGAGAATT
 123851 AAGTTGATAC TATTAACCAA CCTCATGTCA CATATAAGAA AATATGGGCT
 123901 TGGAAATCAA ATCTGCACAT AAATTCAGA AGGCTATGCC TTTGTGCAAG
 123951 TTAACCTTAC TGAGCCTCTG TTTCTCTAG TATACAAGGT GGATATTAGA
 124001 ATCTATCTG CAATGCATTG TGAAGATTCA GTGGGATAAT GCATATTAAG
 124051 TGCTGTGAGAT ATTTGTGAA TGTCCAATAA ATGGCAACTG CTGTTATCAG
 124101 CTCAAATCAG GCATATGCAA ATTGAACTAC TGCGAAATAG GGAAGTACTT
 124151 AGGAGAATAT GATGTATTGT TAGTGGATAT TTCCCTTATCA GAAAAGAACT
 124201 TTGCATAATC CGTAAGGGAC TTCTCTACT TCCCATTCGA CTGAAGAACT

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124251 TCAATTAGT ATTTACCCA GCATTTGCTG CAAGCTTCGT AGGATAACCCA
124301 GCCACACATA CCCATATCAG CAGCAAGTTC TGAGAGCCAG CGGCAGTATT
124351 AGCATTATAA AGTGTTCCA GAGTTGGACC AGTGTGTGCT TCCCCTTCAT
124401 AAATCCTAA ATCTTAGGCT CACTCAGCTG GAAAAAAA AAAGAAATCT
124451 GGGTTGAAG AACACTTATT TATTTTGAT TTCTCTGCC TTGTGTGCTT
124501 CTTTGACTG CGCATCTGAA TATCAAGGCA AGAAGTGCTC AAGTTCTCT
124551 GGGCTCTGGA AGGCTGGAAC CAATGGTAT TCCTGGAGTC GGTCCTTTT
124601 GGACTAAAGC TCCTTTTCT TTTCTCCCC CCAATAAAA TTTCTGTTCC
124651 AGGGAGTACT TTCTCAGTCA CTCTTTCCT AATGTAATTG TGTTTGATT
124701 CCACTGAACG GCTCCTGAAA GGAGACACTG AACCATGCCT CCACAAGCAT
124751 TTCAATTCTT CAACACCAGC TTTCAGGAG GAGCAGTTCC AGATGCATT
124801 TTATATCCAG TAATCATGCA TTTAACAAA ATGATTGATG CAGCATT
124851 TCCCTCTCT ATCATTCTCA GTCCATTAGT CTATTTGTT TTCCATGGTT
124901 TGGTTCTCG CCAAATCAGT GAATATACAA ATACTTGAT AAGTCATGCA
124951 CATCTACACA CACATACATG TAATAGGTAC TGTTCTGTGTA TCTGAGTTG
125001 ATATTCACA TTTTATTCC AGGCTTCATG TCTCCACTGA AGTTTTAGCC
125051 GCTTCTTCTC TTCTTCTTA CTTCCCTCTC TCCCTCTT TTTCCCTCT
125101 CTTCTCTCC TTTATAGTCT ATTAAGTTGG TGCAAAAGTA ATTGTGATT
125151 TGCCATTACT TTTAATGACA AACCACAATG GCTTTGAC CAAACCTAAC
125201 CTTTCCAG AACACGGCAC TTTTTTTTT TTGTCAGCCA TCATAGAAC
125251 TGATATTCTT CAGCGTAAA GGGGCTTGAG AGAGGCATT ACATAATCCG
125301 TTCACCTTCTT TTTCAAGAAAA TCAACAGGCC AGAAAGGAAA CCATGTC
125351 TCCCAGGCTT TCCTGGCCC TTAGGCAAAC ATTCAGTGC CACGTC
125401 ATCAGCCCTT GCACGCCCTG GACCTGCCC GCTGCATCAG CCACCTCTCC
125451 ACCTCAGTCT TCACACTGAC CTCTCCACTT CAATCTTCAC GCTGTAGCCA
125501 CACAGGCCCT TAGCCTTGC CTTGGGGCCT TCACACCTGC TTCTCTCGCT
125551 GCTCGGACAG TTTTCATAC ATAGGTGCAC ACACCTTCTT CACTGCTCCA
125601 CCTCTTATT ATTCTTCTAG TCTCAGCTCA AATGACACTT CTTAGATCAC
125651 ACACCATACCC ACCCTCTCT GACTTCCAC CTTTCTCTT CTGACACTT
125701 TTACGATTG TAATTTGTA TTTACTTGGG TATTTAGTTG TTTAATGAT
125751 CTTCACTTAT TAGAAGACAA GCCCTATAAG GACAAAGACC ATGTTTCCC
125801 CGCCCTCAA TTGTTTCTC AGTGCCTAG ACAGTGCCTT GTGTTTGATA
125851 GTGACAATAG TTAGCAATCA TAAAGTGACA GTATCTAACAA TCTGTTAAA
125901 ACTTGCTAGT TCCAGGCACA GTGCTCTATG ATTTTATAT GTATTTACTC
125951 ATTTAATACT TACAACATT ATCCCGTAAA GTAGGTGTGA TTATTATCCC
126001 CGTTTGCAA ATAAGGAAAC TGGTCAAGTC ACTCACCCAA GATTATATGG
126051 CTGGAAAGTG GCAGAGTTG TTGTAACCC AGGCATTGAC TCCAAAACCT
126101 GAACCCACAA CCAGGCCATG CTACTCCTGT TAAGCACTTC ATTAATATTC
126151 ATTGAGAGAA TAAGTGAAAA ATATACCTTA ATCAATTAGT AGCAAAACTG
126201 AAAACCTAAA TTGTTGATT GATAAGCCAT TTCTCTTCT ATGCAAACAG
126251 AGAGCCTCTC AGGTCCACC AGAAATGCAGC AGAAAGAAAG AGAAGATTAA
126301 CAAATTCATT TATTGCTGAT AAGAACTATG AGAGGGACGC TGTGATATAG
126351 ATCATGAAGT GAAAGTGGAAA TTATTTTTT AGATTCAAGGC AGGACCCAGT
126401 GGCAGGTGGA AAAATACAG AGTCATTGA AGAGGCCCTA AGATAAGGAA
126451 TCAGATTCTC CAGAAACATC AAGTGGGTTT ACAGTTATTA TCATTAACAA
126501 TTTAGGCAAT TCTTATGCTA TGGATAACAT TTCCAAATG TGATTTTAA
126551 GTATGAGTAA TCATCAGTT TATGAAACTG CTGCTCAGAA TTCTAGGATA
126601 AAAACTCCAA TAATGAGCCT TGTTCAGTTG TTCCATGGCA TGTGGAACAG
126651 TTCTCTAGCAC ATATAAGCAC TCAACAGACA TTATTTAGT AATTAATGG
126701 AAATGAACAT CAACAAATCC ATCAGCAAAT ACTTACTAAG TACTCGTTAT
126751 TAAGTCATA CAGATCAAGG CACACAAAGG CACAAAAGTA AAATGTCAGA
126801 TTTCTTTCA TGGAGAGCTC ATAATCCAGG TAGACCCAGA AATAACCACC
126851 ACAATGAATA AAAGCTGCTA GCTGGGCATG GTGGCACATG CCTGTAACCC
126901 CAACACATG GGAGTCGAG ATGAAAGGAC CGCTTGAGAC CAGGAGTATG
126951 AGACCATACT AGTCACACATA GTAAGGCCCT CCCTCTACAA AAAATTTTTA
127001 AAAATCAGCT GAGCATGGTG GCCTGTGCCCT GTAATTCCAG CTTCTCAGGA
127051 GACTGAGGCCA GGAGGATCAC TTGAGGCCAG GCGGTGAGGG CTGCACTGAG
127101 CTATGATTG ACCTCTACAT ACCAGCTTGG CCAACAAAGC AAGATCTGC
127151 CTATTAACAA TTGTTGATAA AATAAAAAAAT AAAAGTAAAC GCCACCATCA
127201 CTGGGGAGTT GCTTTGCTCA GGGCTCTGC CATGTCCTC TGCAATATATT
127251 AGGTCTCTT TATACCTGTA ACAACTTAA GATGATGGTA CCCTTCTCTCA
127301 TCCCCATCTC TAGATGTTGA AACTGAGGTT TAAAGATGCT AATTCTGTC
127351 CTAAGACAC AGAAACAGA ACTTACTGCA GCCAGGATTG GAACTCAGGT
127401 CGGTTTGAGT CTGGAACCAA TGATGCCAA TGTCTTCATC CCTTTATTTT
127451 GAAAGCACTA TCTGTGGGT AGGCATACTA GAACTACAAG ACTTTGCACT
127501 ATCAGAGGAT GGGAGTGGCT ACAGAGGGAT CAATGAAAGC AACATTACCC
127551 AGTCTCTCCA GGTCTGCATA TCCTGCTTAC CTGGGTATGA AACACTCCAT
127601 CTCTCACCTG CCACAGTCCT GTCATTCAGG TCCCAGATTG AGTATCACTT
127651 CTGCATATGC TGCTTACTTG GGTATGAAAT ACTCCATCCC TCACCTGCCA
127701 CAATCCTATC GTTCAAGTCC CAGATTCAAGT GTCACTTCTT CCTGGAAGGC
127751 TTTTCAAACA TGGTACAATT TGATTGTTTCTCCTTTATG CTCCCTTTAG

127801 AATCCGGTGT GTTCCCTGAT TATAATTCTT ATCTCGCATT CTGATTACTT
127851 GTTTCCCATT AACTAGTC TTGAGTTCTC TAGGACAGGG GTGACCAATC
127901 TTTGGCTTC CCTGAGCCAC TTTGGAAGAA GAATTGTCTT GGGCCACACA
127951 TAAAATACAC CAACATCAAT GATGAGCTAA AAAAAGAAAT TCGCAAAAAA
128001 AAAATCTCAT AATGTTTAA GAAACTTTAC ACATTTGTGT TGGGACATAT
128051 TCAAAGCCAT CCTGGGCTGC ATGGGCTCA CAGGCCACAG GTTGGACAAG
128101 CTTGCTCTAG GATACATTT TATTCTCCA GGCGCTAGCA CAGCCCCTAG
128151 CATAGTAA GTCACTTAAT AAATAAGTGT GGAACGAATG AATTTTAGGT
128201 AGAAATTGTC ATCAGATGGT TCAACTAATA TACAGCACAA TTCCAAGAGA
128251 GGAGTGTATT CTTGGGCATC AGGGAAAAGG GACTTTGGAA AAGTTGAGTT
128301 GGAGGCCATG TGCTATTAA GATATCTGTC TCCACATGCC TCGACTGACT
128351 GTGTGAGCCT TGGAAAGTTA TTCTCTTTC ACTTCAGTGT TTTCATCCTT
128401 ATAATTAAGA TGATAAAAAC TGGGTTGTTG GGAAGTTGAA ATAACCTAAC
128451 ATGCAGGAAC TCAGCAGAGT GTCTGTTCAT TGTAAAGTACT CAAATGTTGG
128501 CCATGGCTAT AGCTGCTGC GCTTGTCTC TCTGAATTAT TATTATGGAA
128551 ATTTGGTGA GTACAGCATT TCAGGCAGCA GGTCACTTCT GAGTAAAGT
128601 ACAGAACTAT GAAGAGATCT CCTACCCCTTG GATATAAAA CAATTACAG
128651 CATTGCCAAG AAAGACTGTA GATATTCAAG GATGAGAGTG AGATTCTAT
128701 GAGCCAGAGA ATCAAAAGCT CTGTAATTAA GTGAGTTCGT GATATCATGC
128751 TACGCTCTG TTTTAAGAG CTAGATATCA AAATAAAATGG TCCAGTGTAT
128801 GTGCCGTATG GCTATGCTT TTCCACTGTA CACACAAGTA AGATTCTGCA
128851 TGGTGAATCAT CATTGTTTC TCAGGAAGT GATGAATCAG CCGTTTGGTT
128901 CCCTGGGAAT GTGGCTGCT GCCTTTAAT TCTTTTTGGG GAAGATTCT
128951 ATGTCATCAG CCATCTGTT TATCTGGAAA CATGGGACAA ACGTTGGCTC
129001 TCTTCTACC TATGTAATGCC TTTGCTAGGG TTGTACAGCT TGAGTAAAT
129051 TGGGAAAAGT GATTGGATC CTTGTGACTG GGATTAGGG GAATTGGTAC
129101 ATGACTATAC AGAACTCTT CATTGATCTC CTGCTCTCTG ACCTTGATT
129151 AGCCACCTAC TTTCAGTGG TAAGGCCCTA CAGAACAAAC CAACTGAAGC
129201 ATACTTTAGG ATAGGCCACA CCTCTAATCT CATATTATT ATGACCAACT
129251 AAAAACTGCT TATCTCTC TTTATGTCTA TTATTTAACT TTCCCTCCT
129301 CTCTACCTTC TTTCCTTAA GTCCCTCTGA TACACTACAT GCTCCTGCCA
129351 TTGTGACTAT GAGTCTAAA AGCTGGTGGC ATTACCCACC TTCCCTCTCCA
129401 CCTTCAAAAC TCACATGTAC ACCATGCTT GGGCTTCTCT GATTTGGCTC
129451 ACTATTTCTT CAACTTAGAA CGCCCACTTT CTATTATGAT CATTAAAAGA
129501 TCCCTGGATT ATGTTGGGGG TGGATGTAGT AACAACTGGG AAATAGCATA
129551 AAATTATTG TTTCTCTGTA TGCTGGTTT CTTCCTCAGAG GTAACCTGTT
129601 TGGTTTGACG TTTGGCTTAA TGGTGTAAAT TTGACGAAGG TGGAAATGGA
129651 TGGGCTAGAA ATCTTGTGG GACTAGGATA AGGCTTGAAT GGTCTAATCT
129701 AGGGATTCAA ACTTTCTAGT TAAGAATGTA CAAACCTGTGA GGATAATTG
129751 CATTTTATTC TACATATATC CCAATTAAAC CAGCTTTCTAG ACTTTAAATC
129801 ACCATAAGAT TTGAAAAC TTCTACTGTC TAAATACAGA ATAAAGTTT
129851 CTAAGCCAGA TGAAAAAAAT TGCATCATT TTGCACCCCTG CAGGCACAAATG
129901 CATGTTGACT GCAAAGCTAT ATAATGTGT GTGAGTGTAT TAAACAGGTC
129951 TGGCTATTGA ACTTGTAAA AATGGATGTC AGGAAAGAAA AACAGCAGGT
130001 GGGTGTAGAC TGGAGGAGTG GGCAATGCCT GCTGACAGAA AGAGGAGTGA
130051 CAGCTGACAA GGAGGGAGG CCCAATGGAG ACTTCAGGCT CACCACGTAT
130101 GGAGCAGTCT GGGGACCGAA ACAAAAGAAAT GAAAACAAAC AGAGCACCC
130151 ACCACCTCAA GAATCCCTAA GGGAGTTATA ATATGCACAA ATGCTCATGA
130201 TTATTAACCA GGAACCAAGT ATTCTATGCC TGCTATGAGC CAGGATTCTAT
130251 TCCAGGAAT TAAAGAAAT AGAAAAGAGT ATAAAATACA GTGCCTAGGT
130301 CTGCAAGTAT TTATTAACCTG TGACACTACT ATGTTGGCCA AGGAGAAGTT
130351 CTGTATATTA TGCTCTTTT ATAAAAGCAG AAGCATGTAT AGAAACTATT
130401 AGGATATTCTT TCTTCAAAAT GTTTAAAATT CTTTAGCTGC TTACAAGAGA
130451 AATTATTTA GTACTACTT CTCAAAGATC CCATTTCTG ACAATGCTAA
130501 TAATGGAGGC ATTTCAAGAT AATGACCTCA TAAAATTCAAC ACAACTGTCT
130551 GTCTGTGCACTT GACTTAGAGT CACAGTCATG ACCTCACTTA GGTCAAGGGAC
130601 AGATCTTAGC TTGATAGGGC AATGGTCAGA AATGCAGTTT GGTTAAACA
130651 GTTTTTCTCT CTTCTCTGTT GACTCATTTA ATGAAAGAAA GTGTCTCATT
130701 CAACCTGCAT ATTTTTCTA AAGATTCCAC AATGATGGGG CCATGTCCTCC
130751 TATGAGTTAT TATACAAAAT GGACACTGAG TCCTGAGGTA CATTAGGAAG
130801 CCCCCAAACTT ATCCCTGTAT TTAATTCTATT TGAACATTAA GGATATTAA
130851 TTTTATCAAG CCAGTCATT CGAGTTGAGA AGTCCGAAGA TCTTACTCAT
130901 TTAGGAAAGA CTAGGTTAGG GCATTTCTC TGGGGAAAAGA CCTCTTCTGT
130951 AAGGGAACTT CAAGAAAGGG AGCAGATGGG CTCTGTGTCT ACTGAGAGAC
131001 AGGAGGATAA TCAGGCAGTG ACATAGCCCA TGGTACTGGA GAGAAAGACAA
131051 AATCGCTATC CACATAATGG AAGGCATGGG CTAGGGTGAG CCAAATGGAA
131101 GGCTTATAAA GGCAGCAAGC AATGAGGACT AGCCATTAT TAAATGGAA
131151 AAAGGGACAA GGTATCTTA TCCCCTTTA TCCCCTGTCA CAACAAAATT
131201 ATTTTAAAGA AAAGAGAGAG AGAGAGAGAA GATGAAGAAA TAAAGAGTGG
131251 GAAAATACTA CTACAACCGT TTGGCCTTCA TGGCCTCTTA AAATCTGAGG
131301 CAGGTCAAGGG AAAACATGGC AAGAACACTA AACTTAAAGA GTCAGGAAAT

131351 GGATGCTCAA GTGTTGTTGC TGCCTCTGAC TCAGCCTTAC TGTGTGACCT
 131401 TGAGGACAAT ATTTCCCCAA ACTCCACCCC AGAGCACTTA CCGCTTCCTC
 131451 GTAGATAAAT ATAAGGAAGT TAGAACAAAGT CTCTACAGTT CTTTCATT
 131501 CTGACATTCT AGGCTTTAT AATGAGCTAA ACAAGAAGC TTGTTTTTA
 131551 ATGTGTGACA CACCATGAAA TGTATACAGA GAAGTGACCT ATAAATTCTG
 131601 ATTAAGTGTG AATTAGATGC AAATACAAAAA TGCAGGATTA GAGTAAAAAG
 131651 CATTACCCCT CGTAGGTCA GGAAGTATAA TGTTGGTTCT TTGCACTATG
 131701 AATAATGAAT ATTGTACATG CCGAAATGAG CACTGGAAA CATAGAAGGA
 131751 ACTAGATGCT CTTCTAGAAT GGGCTTCCTT CCCTTGGGA TAGACTTTT
 131801 TTTTTTTTCC TATTTTGCA CCCATGCTTA GAGAGGACAC AAACATCTCT
 131851 GAGATTCTAC TTGAGACAAT GCGACAAGCA CTAAAGGAA CACCAAATCA
 131901 TTTGAGTGCA CAGGCAATGA CACCATCTGT AGACTTATCT GATCCAGAGA
 131951 ACCTGAGGTG GAGCCTATAG CCTCTGGTCA GTTGGAAAGCC GTGGGAAAT
 132001 CTCAAGAACCA CCTGTCTGAG GAGAAAGAAA ACTTTATCTG CTTGTTACAC
 132051 ATGAGCCTGA GCTGAGGAAA TAGACCTGGA TCCAGGGAAT TCCTGTTAC
 132101 TGGGTCCAC AACCTGTGTT AGCACTTGAC ATGATTTCTT CTATTTAAAT
 132151 ATTAGACTAA AAACACTCTA TCAGACTAGG GTTTAAAT ACTATTTCAT
 132201 TTTTTGGTA CCTATTATA AAATGGGAA ACTGAGTCTT GGGGGATATT
 132251 AAGGTCTTAT AGACTGTAAA TGGTATAATC CAAGGTTGAA AGGTTTCTG
 132301 ACTCTAATGC TGTTCTCTT TCACAAATACC TCATTGCCCT CTGGAAGTTG
 132351 TAGTCTCAC CCTAGTCTG CCTTTATTG GCTGTGGTAA TCAAAACAAA
 132401 TCACCTAACCT CTTGAAATCT CATTGTTTC TTCTGTTAAA TATCACAAAAA
 132451 CCAACCAACC AACCAAAACA GTGAGAAATAG AGCTTGTAA TGCTTCATG
 132501 ATTTGTGGAT GGTCTTCACA GGCAACAAATT AATTATGAG GAATGATGCC
 132551 CACTGCTGTC ATGCAACATA GTGGCCCTGG ATTTAAGGA ATCCATGTAT
 132601 TAATACATGC AACCTGAAAT CACATATGTA AATTGTATTA TATACTTGCA
 132651 TATCTATATT GTTTAGAGA AGAGGCTAAA GCCTTCTTGA GAGGCTTTCT
 132701 GTGGCATCTA TATCCCAAA TTCCTAAAAA TCATTAGTTT CTTGGCAGCT
 132751 CATTAAAGTGA TTAGTAGGTC TCCTTATGAT GTGTTATAAC TCAAAACATC
 132801 AGTAACCATC TGAAAGGAAAT TAAGGTTTAG GACAGGATG GTGGTACACA
 132851 CCTGTAATCC CAGCATTGG GGAGGTAAG ATGGCAGTAT CGCTTGAGGC
 132901 CAAGAGTTA AGAACAGCCT GAGCAACACA GTGAGACCCCT ATCTTTACAA
 132951 AAAATTTAAA ATTGTTATTA AAAGAAATTAA AGTTTAGTA CATGAAAGCA
 133001 GCTGAAACTC AGAACTGACC CTTACATCAG AAACCATGTG GTATCATGGA
 133051 AAGAACATCG GCAAAAGATC AAAGATTCTG GTCTACTT TACTCTGCTG
 133101 TGAACCCACT CCATGAATCT GGGCACATAC TTGGGCCCCC ATTAGTTGT
 133151 CATTCAAAATGAGATGCTAA GTTCCAGCCT GCCTCTCCCA AAGCACTTT
 133201 TAAAAGAACATC AAATGTGATA ATATGGATGA AGGCACTTG GCAAAATATG
 133251 AAGTACCTG CAAAAGTCTG ATATTAACCA TGAGATATTA AAGTATCAAG
 133301 TCATTCACT AGTGTCAAC TGAGAAAAG GGAAAATTGC AAGTTCCATC
 133351 AGCAAAATTGAGAAGCTTGT CTTTTTCATT CCTTCAGCAA GGTCTACAG
 133401 CTGATATTTCGATCATAATT TTCTGACTT TAATGAGAAT TGGTTGCAA
 133451 TACACCTTAC AGGATTCAA TGGAGATCAT CACCATTCTA GGAGCTGCTA
 133501 AACAGAACAT GTGCTCTT CTCTAGCCAA GAGTTCTCTT CTTTATCAC
 133551 CTTTATTGTA TGATCAGTGG TTCTCAAGGA ATGGTCAAGC ACCAGCAGCG
 133601 TGAGCATCTT CTGGGAATAT GTTAGAAATG AAAATTCTCG AGCCCCATCC
 133651 CAGACCTACT AAATCAGAAA TCCTGGAGGT GGAGCCCAGC AGGCTGTGTT
 133701 TTAACAAACC TTAAAGAGGA TTCTGATGCC CTGCACACTT AAGTGTGAGA
 133751 ACCACTGCCA TAATGAGTA TCCTGGAGA GACCTACTT GGTCTGGGT
 133801 ACTTTAAGGA AAATGTTGGG GCCCCAGTAA TCCAAAAGAG TACCTCATCT
 133851 AAGCTCTGA AGGGCTGTAT TTAGAGCAAA GTTGGGGCTA GTGAATGTCA
 133901 ATGTTAGCAA ACATGGTGGG TGTGACCCAA AACATAATCA AATAGGCCTC
 133951 TTAGTTAAA GTCTGATGT TAGTTTGCT GTTGGAGAAG GAATACAAAT
 134001 GTATCTCAAG GAATGCAGTT CTCTCAAGAT TCAGAAAGTA TGGATACCTT
 134051 TGCCATGCTT GGCAGCTTGA AAGAAATAGC AATGTAAGT TAAACCAACGC
 134101 CTATGTGAAA GTTAGCTCCA TAGCAGGCTT TCTTCTCTGA GATTGAAATT
 134151 TATGAAACAT GATAACAAAT ATGAAAATAG ATAATTTTTA TTGAATATCA
 134201 TATCACTACC ACTATTAA GTGATTTGTA TGTTAAATG GCTAACCTT
 134251 TTTCAGGTAG TTACTCCACC AAGCTTTG CTGGGCCCTG AAAATGTAAC
 134301 AGTGAACAAAG AAAAAAAATCT CTTTCTCAA GGAACCTACA CTTCAATGAA
 134351 GGGAAATTAG AAGAAATTAG CCTATTACTG TTCAAGTTCA GGGTGTGTTGC
 134401 AGAGGCCTAG ATCCGGCACC TACACTCAGT CTATGTAAGA TAGAGGTTTC
 134451 TCAAAAGGAAG AAATGTATAA ATTTAGACCT CTGTAGAGTG AGAGGAGTTG
 134501 ATCACTTAG AGTGGAGAAA CAGATTAGG ATAATATAC TCTAGATCAC
 134551 ACAGCAAGTA AGTGATAGTG TTGGGATTTG AACTCAGGTT GGTTCATCC
 134601 AAAGCCATG CTTTCAACCA TTAAGGCAAG GGCAGAAAAT GGGTTTTATC
 134651 AAGCCTGTCA ATTCTGACAA ATTAATAATG GCTTCCAAGA ATGTGGATGG
 134701 TGAATACTCG GTGAGCACTG GGCTCAATTG GAAAAAAA TGCCATGATT
 134751 AATTAATAAT GTCTTCCCTG GGTTCAAGAGA GGAGGGTGTAA TGTGTATGC
 134801 ATTTGCCTAC CCTGCAGTAC AGAGTACTGCT CTCAGGACT TAGCACGAGA
 134851 GGATGAAATC TGCGGTTGTT TCTTATTCTAT GTAAAGAGTGT CTATGACTTC

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134901 AAGGAACCTT AGAGCTCAAT GGCATCAGCA GGGGCTTATT ATATGTTAGC
 134951 AAAGGTAGCA AGTGACAGCC CAGGATGGAG CATTCACTAA AAAAGAGAAT
 135001 AAAGTTCT GTCAAAAGAG AAGACACTAA TTAAGTTAA CAGTGA
 135051 CAAACAACAA AGCAATTGGT CTTACTAAGA GACTAAACTT CAAAATTG
 135101 AAGCCAATT CATTTCATC TTTTACCTCT GTTAGTTCTA TCAACATGGA
 135151 CGGCCTTAAT ATGACAGAAT ATTTGTTGG AAAATAATGGG ATCCATATGT
 135201 ATTGAGTCAG CTTCATCACG CCCAGGGGAA ACTTAAATT TAAAATGCCA
 135251 CCCAAATAT ATGCATCAA CATGCATAAT GGCTCATCTG TTGAATAGT
 135301 GGGAAAGTGT ATCAATCAGA AGGATTAAGA AGATGGCTGT TTAAGGAAT
 135351 GATGATAATA AATTAGTGCC AGTTGCTTC AATATGTTT ATGGCGTCAG
 135401 TAAGATGGTA GGTGAGCTCT TTGAAGTCTC GTGAAATATG GTTGTTC
 135451 CAGCACATT GTTAAACCCA TATATGGATT GAATCATAAC TAATGACAAT
 135501 AACTGCTCCT ATGACTCAAAGGGAAACAA ATGGATACTG TCAAGTTAGT
 135551 CAGTGTCTGG AAATGGCTTC TGGATGAATT TCCTTGCAA AAAGTCTCTT
 135601 TCACATTCCC CAGCTCACCT TCACATTAA CGCTAAATAAG CACTCTTAC
 135651 TCTAGACATT AACAGATGT TTTAAATAA CTCAGTTATT GGGTATATAA
 135701 AAAGAAGAAG ATGACCTCCC CAAAAGTCCC AAGGTCAAGAG CTATTGCCA
 135751 TCTGAGCAAT TGCCCCAGG AAGAATGTTG TGAATGATCA CTTCTCTCTA
 135801 ACCGTGACTC AGCACAGCAC ACCAACCTGC ACCCATTTC AGAGGCTCAC
 135851 CTTGGGTGGA GGGTGA CTTGAGTATGG GCCTCAGCAG TCACCGCCCA
 135901 AGGGCTGTGC CTGCTGTCA TGCTCTCTA TCACCCACC CACCTGCAGC
 135951 CATCAGAGAG GACCAGTTTC TCACGTATCTC TCCTCCCCCTG ATGCATTAC
 136001 ATGAGAGATG GGGGAGGAGC TTTCCTCCCTT GAGACTTGTG CACCTGTTT
 136051 TACTTGGAA GACAAGATT TACAGTACCA GGAATCAAAA CATTCTCTG
 136101 ATCACGTCA GCTGACCAAGT GCTAAATTAT CTCTGATTCA TTGTACATT
 136151 TACAGTTAT TTGAACACTC AACAGGGGGG AAAAAAATTG ATAGTATTCT
 136201 GTGTAGAAGA GGCTCTGGCC ACAGACCGAA AAGGACTTTA TCTTTACTCA
 136251 TCCCTACCAAG ATTAGATAAT CACGTGGAAA ACTGTAAGAA ACATCTTCAA
 136301 CATAAAGAA ACATGCATCT TTAGTATCTT CTGTATGCAG ATTCCAACAT
 136351 GGAGAAAGTG TTCTAGAGCC TAAGGTTTGA GGACTCCAGG TTTGAGTC
 136401 TGTTAAATGG AAGGAGGAAG AGAACCATTT AAAGGTTTC ATTAAATGCT
 136451 TTTAATACAT TCAGGACTCA GTAACGTCTC CTGTGCAGAG CTCCTGATCC
 136501 ATTACCGCA GCAGAGACAT ACCAAGTCAG CACAGAGAAG ATGCCCTGGC
 136551 TATAACATTC ATTCACTGTGC CGCACCCCTG GTGGCTGCT GAATATAAGT
 136601 CCCTAGTACA TCTCTATT TTTTTAGCA ATATTGCTGC TGAAGCTTAG
 136651 CTGTGTGTC CTCGTGTCC CATCTGCTC TTCTGCTC AGGTGTGTGG
 136701 TCTAGTTAT CTCCTATTCC ATGGGAGAAA CATAGCCCGAG GAATGCTGGT
 136751 TGTGAGGAGA TTGATTTCT ACTCCTACTT CTGCCATTAA CTGTATGACT
 136801 TTGGGCAAGG CTCTTCTG GTCCCAGCCC AGCCCCAGCT ATTCACTAC
 136851 CATTAGGAT AGGTGGTCT CTAAGGAGCC TTCTAGCCC CAGCATTCAA
 136901 GGACTTAGTG GAAACTAGAA TTCTGGGTT AGTTGAGTT AGTGCACCG
 136951 GCATTTGCGC ACTGACTTCC TCTTGTCT CATAGCACCCT ACGGGGCACT
 137001 GCAGGGGATA TGTTTATATC AGAGCTCTCT CTGATACCCAGCAGC
 137051 GGCAAAGGGA GAGTGGGATG AGAAAACAA GTGTATTGAT ATACCACTGC
 137101 AGAGCAGACT ATGTTGTATG CTGGAAGCAA AGTACAAATG ATTATAGGGT
 137151 CCAAAGGAAG CAGAAATTTC ATTATTTTAT GAAAAGTCAG AATAAAACTT
 137201 CATGGCATT TAGCAACATT TACTGAGCAA ATATTATGTG CCAGCCAATG
 137251 GAAGTTCTA TAGCAACATT TACTGAGCAA ATATTATGTG CCAGCCAATG
 137301 TTCTGAGCAC TTTGCACACA GTAACTTATT TATTCTCTC AGTCTTTG
 137351 GATTAGACT CTGGTATCT GATTCTGTAT ATGAGGAAAC TGAGGCATAG
 137401 ACTGGCTAAG GAATAGGCTT AGGCTCATGC CACAAACAAG CACAAGCAC
 137451 AGGATTCAA GCTTAGCGAT CTGGTGCCTA CGCCCGTCAC TTAGTGTGGA
 137501 GAGTCAACTG ACTGTACAT AAACAAGGCC ACCGAACCTG GAGGGAGGGA
 137551 GACCTGACTC TGCAGATGAG CTTTGTGTCC CTGGGAAAGT CTTTCAGCC
 137601 TCTGACCTTC ACCTTCTTA ACTCTGAAAT CGGAATGAAA AATAGTTCC
 137651 TCGTTGGGTT ATGATGATTG AGCAAAATGG CAGGAATAAG AATAGATTT
 137701 AAATGATTAA AGATTCTAGA TGATTTAAA TAGGAGAGAA AAGCAGAGGA
 137751 GCTGATTGAG CAAATGCTGA GAGGAGGTA AGTGTGGGAC ATATTTAGGG
 137801 CAGAGTGAATT ATTCACTATT AGGGTCTCTT CTCCACAGTT TGAGAGGTT
 137851 CCACCTGAAG TCTTGTCCA TCTCATCTC TCCAGCTATG CCAGGCC
 137901 ACTCTGCTCT CTCATGTGG AGAATGACAA ATCTAGTCTC TGTGTGTG
 137951 TGTCTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGTATG
 138001 TGTGTGTGTG TTGAACTGAG ATGCCAGCAC AATTCTCATC AGCATTGAG
 138051 TTCATTGGCA GCATTGGAAA GAAAGTATAG ACCCTTAGCT CTCAGTGC
 138101 ATATAGACAT TGGCACATTA GTTTCAGCTG AATTAACCTCA TGTAGGACTG
 138151 ACGCTAAGGG ACAGTTAGAG TGGAGTGGAA ACTTCTCTGC ATACAGAAAT
 138201 AACATCTCAG CACTGCTGTG GTAGCAAGAT GTATTATCAT CATCTTATTG
 138251 GTACTGGACA AAGCAGGATC TTCAGATGGT GCCCAGCGAC TATAGGGACT
 138301 AATGGGAAAG CAGAAGGGAT GCAGCGTGGT TAAATCCAAA AAAAGAGCAG
 138351 CAGCTAAGA GACAGTAGGA AATACGATGG ACAAGGGTCA GGAGACCAGG
 138401 ATTTGAGCCC CAGCTTAGGT GATTGGTCTC GGAAATGTCA TTTCTATAAA

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138451 TTAGCACAAAC TGATAAAGAT GCTCTCTAAA GCACCTTCGG TTCTGATAGC
 138501 CTAAAAATGC ATGAGTTATT TTTAAGCAGA AACTTAACCA CAGCTATTCT
 138551 TAGTCTCTCA ACTAGAACGCT ACATGTGATT CTGCATTCT TATTAACATGA
 138601 GAGGTACAAT TTTCCACTGC ATGTTGCTCT TATCTTTCTT AGTGGCCAGA
 138651 TAATGTTATT TATAAAACAA TAACAAATATA GCCTCAGATA ACTGCACCAA
 138701 CAGAACAAAT AGTAGTCATT TACAGGGCCA GGAACGTGCA AAAAACACGT
 138751 TTTACATGCA TTTGATTCAG AGAGCAGCAC CATTGGGTGG GTACTTATTAT
 138801 TTCCATAATA CAGATGAGCA AGCAAAGGTT TCAGAGTTAC TAATTAACCT
 138851 GCCCAAGGGA CGAACGACCG TTTTGAATCT GGCTTGTCCA CCATCAAACC
 138901 CTTTATCCTT AACCACTCAG GTGCTAGCC CAGAGTAGAC ACAGGCACGT
 138951 GAGGCCAAGT GTTCCAGGTG GCCTTCAGC CCCAGAAATC TCCCCTCACT
 139001 TGAAAAATAA TCTAGAACAA TTTTTTCAG AGGAATCACT CTTTCTTCCC
 139051 CAGTCAGAAT GAAGTCACTA ACTCCAGAGT AAAAGAATGG GGCAAGCGAT
 139101 GCTCTCTGTA AAGTGAATTCA TAATGAGGTA AAAGTGGCA GGTCTCTACT
 139151 GGAGGAGAGA GGACAGCAGC GAGGAGAGTG GCATGGGAAG TGGAGAGAGC
 139201 TGATATGCC CCCACCTCCC CAGTCTCTG AGAGATATTCA CACACAGGAA
 139251 TTCCGTACCC TTGCCAGCA ATTGTTCAAT GACTCTGACC ATGGAAAGCA
 139301 TACGAGAAAA AAGTACGCCAG AAAAGTTGTA TCATGGTCGG TAGACCAGAG
 139351 ACAACAGAGA AACTGGCTGC AAGTCTCAGC ATCACTCAGA AAGCCTTTGT
 139401 TCCCAAGGCA CTATTAAGTA TCAGGCAGAC AGAGAGATTG CTGAGACACA
 139451 GCTCTGTCC TTGAGGAAAG GACTCACTGAA ATAAAGATGGG AGGCAACACC
 139501 AGGCAGGCTA GCATTGATGC AAGATGCTGA GTGCCATAAC AAACGTCTAA
 139551 GCAGCTTGTCT TTAGGTGAG TGTGAAGGGGA GGATCAGACA TAGTTAATTC
 139601 TAACACGAGG TAGGAAGTGT TAAGTGTGCT AATAGCAATA CAAGCCAAGA
 139651 ACTATGAGAG CCCAGCGAAG GATGGATTAA TTCTGACTGG GACTCTCACA
 139701 GAAGAGGTGG TGCTTAAGTG GGACCTTGAA GGATTGGAAT GAGAGATAGA
 139751 GCACTGATGA GATTGCTGCTC ATCACAGGGG AGTTGGTGTAA AGAGGAAAG
 139801 TCTATTGCC TGTGCTGCT TTTCCGAAGG CAGGACGGCT ACAAGCATGG
 139851 AGCTGAAGGT CAGACTGACC TGGCTTTGAT TTCTGTTGCT GTCTTCTG
 139901 TGTGCCCTTG AACTTTCATA TTTTCCCTCTG TAAATGGAGA TTCTAGTACC
 139951 TTCTTCATGG CATTGTTGATT GGGAAACAATT ACATTACAAC ATGTTTAGTA
 140001 ATGCAAGTGT TTAAGTACAT GTTCAATAAA TGATAGTTTT TATTGCTGT
 140051 GCTATGACTA TTTCAGTGAA CATTATCTCA GTCTTCTGGG TAGCATCTGA
 140101 GGCTAATTGG CCACTGTTAG GCAATTAAAG AAGTTAACGA AATGCAACCTA
 140151 CAACTTCATC TGCATTGTC CTCTCTTCAG ATCCTTGTAT ATGAGCATCT
 140201 TTGCTTATTC TTGGATCATA GTCTGCTTT TTGTTTTTG ATTTGTTTGT
 140251 GGGTTTTTT TCTATACAAT AGAGCAAATT ATTGATTCCCT TTTTATAATT
 140301 TCCTCTTCTC GTTCTAAAGT CCTACCTTGG ATGGTCCACT CTTTGTGTTG
 140351 TGTTCAGATC CAGTAGTGAG TGCAGAAGGA CAGTTACCAT AGTCAGCCTC
 140401 TCAGTTAGAA TTCTGTCGTG TCTACAGACC AGCTTTGTTCTCTCCTAGT
 140451 CACCACTATG CTGCTGAGAA TCATCATAGA ATATGGGAAC TGCAGGCAAC
 140501 TGCAGCCAAA TCTTTGTTT TACCAATGAG AACCTCCAGC CCAGGGACAG
 140551 GAAGAAAATT GTCAAGTTTG TACAGAGAGA CAGGCAGGGGG TGGGCCTGTG
 140601 TACTAGTCTT CAACTGTTGCT GACTCACAGG CCAGTGCCTT GGATGGTTG
 140651 CATGCCCTT CTGCTTTCTC TCCGAGACT TAGGCTGTGA GGAGGGAA
 140701 AATGCCCTTC CTCCTCCTCA TTTCCCTTTC CCTCCCCCTT CCTCCCTGCT
 140751 TTGGGTTAAAG CTGAAACATG CAGCTCGTGC TTCCACAAGG CATCCTCAGC
 140801 ATGCTTTCA CAGCACCCCTC TGCTGACTCC GGGGCCTTCA CAGCTTCAG
 140851 CCCAGTTGAC AGCCAGTGAA GTGAGAAGAT TGAAACACT TTAAACTGTC
 140901 TCAGCATTGAA AGAAAGTGGAG AAGAAGGCAAG GTGGGAAACG TCTGTGATGA
 140951 GCGACATTGT AGAGAGTTAA CAAAACCTGG GAGACTTTCA GGGTTTCTT
 141001 CTCTGCTCC CCTGAAACCA AGGATTATAA ATACTTTCAA TCTTACAGGA
 141051 CAACTCTAGC TGTGCAAGTGG TGACTAGGTT GAAGAGGATT TGGAGCGGT
 141101 ACTTGGGCTC CGTGTACACA CACTTGGAA CACATGCACA CACGCATTAA
 141151 TGCATTGCA CTATGTTGAGA GGCATTCTCTG CCTTGGACTT TTAAAAACAT
 141201 GCTTGGCCCTT TAGGATCCTC ATCTTGGAAA TCTGCCCTCT TCTCCCTCTT
 141251 TAAGGGATTC CCCCCTCCTC TGAATGTCGA GAACATGCTG TTCTTCTACT
 141301 GCAGAAATTAA TTTCATTTTC TCATGCAATT TTATTAGTG GCTCATAAGT
 141351 GTGTCTTCA TCGCATTGGA ATGACCCCTCT TAGAGGCAAG GGTCTTGACT
 141401 GTTGTCTTCC CCATACTATA CCACACACAC TATGTTGAAT TGATAAAATT
 141451 ACTTATTCTAG TGAATGTTT GGTATTATAA TAGACATGTT GCAAGGTAGT
 141501 TTAGCAAAGT GATAAGGACT CATGTGGAAT CAGACATACA GGGGTTTGA
 141551 TTGTAGCTCC ACTATTATCA GTTCTGTCAC CCCTGCCCTAC CTATGTTTA
 141601 GTCCCTCTT TTGTTAAATGG CAATAATAA AAAGTACACC CTCTTAAAGCT
 141651 GTTACAGAGA TTTAAAGAAT TGATGAAAGT AAAATGTTGA GTCTTATTTC
 141701 TAGCATTAAA GTGCTCAGTA TATGCAAGCA CCTATTAGTA ATTAATGTTA
 141751 GAAAATAATAA TGATAATTAT CATCATCATC ATCATCATCA TCATCATTTG
 141801 TTGCACTGTG GCTGTGCCA GTTCTCCAG ATCCCTCAATG ATCCCCTTC
 141851 TTTCTTAAAGA TATGTGAGGG AGATAAGCAA AGGAATATAT TGAAGAGAAA
 141901 AAGCCCAATG TTATTACTG CGTGGCTGTT GCTATGCTGT GGGCTTCTAT
 141951 GAGCTGGAGG ACCCAAGAAA GCTACTTTCC CTGTTGCCCT CACCTATTCT

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142001 TGGCTGTCTG GATCTCAGCA CTATGGGGAT CAGAAGAGGC CACCCAAAAA
142051 CAATAGGAAA TAAAAGGAA TTTTGCCCCA ATGCTTTGAA CAAGGCAGGT
142101 CCAAGCTTCC CACCTCAGAT CTTCAGACTG AAGTCCCCTC CCTCCCATGC
142151 TCAAAGCAGC TCTAGACCTG CACAGCACCC TCAAAGAACG AAATCCAGCA
142201 GAGATTTAT GGCTTAGCA CCATCTGGCC TTATCTCCTT AGCTGTCTTG
142251 AAGGAGACAA TAGAGGGTGG AGGAGAAGTA ATCATCTAA AACCAACAGG
142301 TGGCCCCAGT TGTAGGCTAT GTAGCAGCAT GGCTGTGGTG GTGGTGGTTG
142351 CTTGGTGTAT GTGTGGAAAGT GCAAGGGAAAG TCCTATAATGC AGTGTCTGA
142401 GTGTGTGCAAG AACCTATGGA GGAAATCAGA ACTTGAGATA GAGAAACAAG
142451 TCCTGTTAAT GGTAACGCCA TTTGGATCTG GAAATAACTG TGTTGCATA
142501 GTCCATGTCT GTTCTCTTAC AGATGAGGAA ACAAAAGCTC TTCATTAAAG
142551 GAGAGAAATA GTCCACTCTC TTGTTTACTC TTTTACTTGA CATTGATTGA
142601 ACCTCTCAAT CGCAAAGACT GTGTGTGCA TTAGATAGAT ATGCTGAGAA
142651 ATGAGAAAGA GGCTGTGCCC TCAAAAATTT GTCTAAAGGG GGGAAACATCT
142701 AGATAATCAA TGAGCTAATA AATGATTAGA TACAGTGTG TCCCTCAAC
142751 CATCTCTTG GATTCAACCAC ATTCTCCACA CTCTCTCTAA AGACTCCAC
142801 TCATGCCCTC CGTGAGTCAG AAGCTCCCTGG CCAGTAGCCT CTTCTCTGAT
142851 CAACTCATAT ATTTCTGCTC ATATCACCTT TGCTGGTGGC ATACCAGAA
142901 CAAGAATCAA TTCTGTTTGT TTTCAAACCT GTTTATATT CTGTGTTTT
142951 ATTATACTTG GACAATTAA TTAAATGAT GTGAACACTG GAAATATGAG
143001 TGCAAAAGAA AGTCTTTTT CTGAAACTAA ATACTTTGAA AAGGCTATCG
143051 GATGAAATCACA TAAAATCATT GTAAATTAGA GTATCAGAGA GACGACTCTA
143101 AGGTTGGGCA AAAGCATGGA AGAAAATCTA AACTTATATT TATTTTATAA
143151 GTGCCCTCAA GTTCTGATA TCAAAATATT GATCAATACA TGTGCTTCAC
143201 AGTGTTTAA GTTTTTTGG TATATTTTTT AAATAATCTA ATTGCCATCC
143251 ACGTTGCATC AGTTAAGAGG GCTTCAACTG TAATTAAGAC TTTGAGTAAA
143301 GTTCTGTGAA GGATACAAAC TAAATGTTGT GACCGAGAAC AGCAGGATGA
143351 CCTGCTTAAG GTGGCTCTTG CAAGATAACA AGAAGGCCAGC CAAGCAAAAG
143401 TAGGGAGAA GAGTTTGGG CAGTGGAGAAC CGCATCGGGG GAGGTGTGGT
143451 ATGTTGCAGA AGCAGCAGAT GAGGGAAAGG GAATGATAA GGTTTTTCAG
143501 GTCAACAGCG CTTAGACAGT CCAGATTCTC AAAGGTCTG CAAAGGAGTT
143551 GGGACTTTAT TCAAAGCATG ATGAGAAAGC ATGAGGGGCT TGAGGGGATC
143601 TGTTGACAG GATGTGATTT CCATTTCAA AAGAGCTTCC TGGCTGCTAG
143651 ATGAAAGGATG GATGAGAACG GAAAAAGGGG AAGTGGGCAA GGTGGAGGCA
143701 GGGATGAATT AAAGTGCACAA AGGCAAGTGA TAAAGTGCAC TAAGTCTACA
143751 GTGACAGGTG AGCAGTGGCA GAGCCCTAGG CCAGGGTGAG AATGGAGATG
143801 TAAAGTGGGC ATTGTAAATA CATTGTGAC ATCTTTAGAG GGACGTGCA
143851 CCATATTTTC TTTAGTCAT CTGCATGACC AAACCTACAG CTAATTTTG
143901 AAGGCATAGG TGATCTGATG GGGGAGAAAA TCCTACAAA AGTCAGGCAG
143951 CTGGGTTTCT TTTCTAGTT TGATATTTAT TGCTGTGCT ACTCAGAGCA
144001 AGCAACTTAA CTCTTGAAG CTCATCTAGA AAAGGACAAT AATAATATCC
144051 TGTGCAGCCC ACCTCATATT TGGGTTATGC AGTTAAATA AATAGATGGC
144101 TTACATGTAT CTAGGACTTT GGTAAGCTTA TTCTTCACT TGATCCTCAC
144151 GGCGCATAG GCAGATACTA TGCTCCTCAC GTCACAGGTG AGCAGACCA
144201 TACCTGTTCA ATAACCCGTT ATTGAACATC TACTATGTC GGGTCAGGG
144251 CAGGCCCTGA GACTTTGAA ATAGATTAGA CCCAGCCCTG TCCTACAGAA
144301 GTTCACAGTC TGATGAAGAA GACAGATATG AAAATGTGAA ATTATAGAA
144351 ATCAAGATAC ATGCTAAGAC AGAAAGTACA TTAGAACCTT AGAGGAGGAA
144401 GAAATGAATT TTTCCTGGAA GGAGTGAAAA GCTTCCACT GGAGTCACAA
144451 TCTGGCTGGG GTCTTGAAGG ATGTTGAGAA GTTTCCAGG TATGGAGGGT
144501 CATTTTGAG AAGGATATGC AAAAGATATGC AGGCCTGGAA GGAAATGGTT
144551 CATATGCATC TATGTGGGTG GGGCTCTAGG TGATTGGCAA ACTGTTAGGA
144601 ATGAGGCTGG AGAGTGAATC AGGGGCAGGG AGGCTCCTGC TCATGGATCT
144651 GTGAGTGAAGT GAGTTATGCA AAAGCAGGAA AACTAGTACA TTTGCTTCAT
144701 TTTCATTCTT TCCCTCAAATG CTTCCCCCAG TTTCATAGTA TACATGTTCC
144751 TGTGCCTTAT ATCCTCTTCT TCCTGCTTA CTGTTCTCTC CAGAATTAAT
144801 TTGAATCTCA GCCTTTTCC TGGAACTCTT AATTAGCA GGGATATACA
144851 AAGGAAACAC TCCAGGATAG TGAGAAATGC CTTTTTTCT CCAAATGTCT
144901 TCCGGAATTG TGTTACTTAG CAGGAGTTGT TTCCCTGCCAT GTTTTGAGAA
144951 ACTTTGAAAAA GCGATTCAA CGTGGTGCA AAGGGAACTA AATACTGGT
145001 AGTGAGGAGC ATCTTGGCAG AGAAGGCAGC TGAGCTTTG CTAAAGTCTC
145051 AGTGGTTGAA ATTGTCCAGG AGGCTCTGAGT TTGGTCCCTT GGGCTGGGCA
145101 GCATGTGCTC TTGGTTGTCAG TGCCCTCCATT CCTCTCTCTG GAAAATAGTA
145151 AAGAAGAAAAA TGTATAAGTT AGAGAGGTGA AAGAGTGTAA GAGCTAATTA
145201 AATCTCACCT ATTTCATGTTA TGAGGAAATA ACTCCCAAAG AGGAGAAATG
145251 ACTAAGTTCATA TATAAAGAAC CTGCAGCTAA CTGGTCTT CAGTCATATA
145301 AAGAACCTGC AGCTTACTTG GTCAATTATG CATTATTCC ATTCAAGCAGA
145351 CATGTTTCAG TGCTCCCAT GTGCCAGGCA CTGTGGTAGA TGCTAGGACA
145401 ATAGTGATAA GTAAATAAAC ATGATTCTTG CCCTAATCAG GGAGATGAAA
145451 TTAAACAAAT AAACCAAAAG TTAAACAAAAA TAATTAAAGA TAGAGATAAG
145501 GTATGATGGA AAGAAACAAAG GTACCGCAAT AGAGAATAAA GAGTAGGGAC

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145551 CGGGCACGGT GGCTCACTCC TGTAAATCCA GCATTTGGG AGGCCGAGGC
145601 GGGTGGATCA CAAGGTCAAG ACATCGAGAC CATCCTGGT AACACGGTGA
145651 AACCCCACCT CTACTAAAAA TACAAAAAAA ATTAGCCAGT CGTGATGGCA
145701 GGCACCTGTA GTCCCAGCTA CTCGGGAGGC TGAGGCAGGA GAATGGCGTG
145751 AACCCGGGAG GTGAGCTTG CAGTGAGCCG AGATCGCGCC ACTGCAATCC
145801 AGTCTGGGCA ACAGAGTGAG ACTCCATCTC AAAAAGAAAAA AAGAAAAAAA
145851 AAAAGAGTAG GATGAGTATT TTAGAGAAGG CCTCTATGAA GAGAGAACAT
145901 TTTAACGCTGA GATCTGAAGA ATGCGAAGGG GTCAAGCCACT TAAAGAGGGT
145951 TGGAAAGACT TTCTAGGAGA TAACAGCTTG TGAAAACCT CAAGGCAAGA
146001 AAAGTCGGGAC TGTCTGAAA GGTAAAGAGAA AGACCAGCAT GAAGGCCAGG
146051 CAGAGGTGTC ATGGCCTGGA AGCAGATGTC GTGGGAGAGA TAGGCAGGGC
146101 CAGAACTCAG AGCCTCAGAG TTCAAAAGTGC CCTTATTGGC AGACTCTTG
146151 TTGATCTCAC ACCCTGCGG AAAAGGAAAG GCAAGTATAC GTGCATTGCA
146201 AGACTCTATT GGCGCAGCAT TTGTTTCAA TGTCGTTTC GCAGCATGCT
146251 TTGCTGAGAC CATAGATTAC AAAAACAGAA ATAAAATGAA TTCAGCTTT
146301 CTTCTGTGTC CCTTCCTCAA CTTAATTAGT GCTCACAGCT CCAGAAATCA
146351 GTTGAGGGCA GGGGTCAGGA CTGAATTCAAG ATATAGATGA AGTGGGACTT
146401 AGTTTCTGGT GTTGCCACTT GGTTTAAAG ATGCAGAACT TCTTATCTTC
146451 CATAGCTTAA TTTTATCCTT CATTGGTC CTTCACTTC CTCAGTGGAT
146501 AAATCCTAGC TAGAAGATGA ATTTGTCGA TTAGGGCAC CCTCGGCTG
146551 TCCCTGTAG CTTTCAGTAA AGCTTGTCT TGATTGACAG ATGCTGATCA
146601 AGTTCATGGG TATGCAATTAC AGTGTACGTT TGCTGGTTGG CCTAGGAAAAA
146651 CCCATTGCA CGTATGACTT TCATAGAAA AGAATGGCAA ATAAGAAACA
146701 AAAGATTTT TTTCTGCCAC TCACCCAAGG AACAGAAAATT AAGACAGCCA
146751 AAGGAAGAGT CTGCCTTCAT TTAACGGATG ATTTACCTGG TGTTCCCTGC
146801 GGTAGTGGTT CATTGTAAG CCAGCAGAAG GTATTTGTG ACTATGGGAA
146851 TTGCGGAGAT GACTGGGCCA GGAGGGGAAG CTGTAAGCT AATCTCTCCC
146901 ACAACCCACT TCTCTTGGC TAATGGCTTT GCTTTGCTTT GTTCTGCTTT
146951 GGCTGGTCA TGCTAGTTC CCCCAGGCT GCACAAAGGC AGAGCTAGGT
147001 AGATGTACTC CCTACCCAGGG CTCTTAGTG AATCCCACCT CCTAGCCCCA
147051 GATGAGGCTG AGTAAACACT CACTCCAGCC TTGGACTGTA GCCTTTACTG
147101 TGGCCCTGA ACCTAACCA AGAATGAGAC TTGTTGACCC AAGGCTCAGA
147151 CCCCAAGTCT CAGATCCCTT ATTCAAAGA GAGCTCCTCA CCCCAGCTCC
147201 AGACTGAGCC CCTGCCAGG CATTCCCTGGC TGAGTCCCCA CACGTGGTAG
147251 AGCCTTGGCC TCAAAGGGTC CATCCACAAAT GTTGTGAGTC CCTTGGTACA
147301 TATTCACTT TTGAATGAAC CTCTGAGGAC CCCTGCCCTC TCAAGACTGG
147351 CGTCTCTCT GGCATCTCAT CAGAGTGGCT TTAGCCATG GAGCAGTGT
147401 ATAGCCTCTT CTAGTCCAAA GCTGCCCGGT GCTAAGAAGA GGAAGCCTGG
147451 AACTCAGAAC CTCTGTCTT GTGCCAACAT GTTAGTTGCA GTCTATCTGT
147501 GAGCTTCACA GTCCCATGTA CTCTGTACA GAAATCAGCA AGCAGTGGTC
147551 TTCAGTCAA CTGGCACCTC AACATCGAC TTGGTCTTG TCAGGGTTCC
147601 TTTCCCTTAC TCTCTTAAG AGCACCCAGA GTCACCATGAA AAGAACCCACA
147651 AGTGGAAAAG GAATACGTGG GCTCAGACGT GTGTCATCC TTGCAATGACC
147701 CTTGGCTCTT CATCTGTCA TGGCTTTAAA GTCATCCTT CCTGCCCTGC
147751 CTACCTTATT GAGTATTAC AACAGAAAAT GAATGTAGGA GATTGAAAAT
147801 TGTATAATGC ACTCTAAGTT ATTATTACCT CTCCCAAATT GTCAAGCATT
147851 CATCCTGCT ATCTAGCAGC AGAATAGTGT AGGGTAGGAG TTTACAAACT
147901 ACAGCCCCACA GGCCAAAGCC AGCCCAAGGC CAGATTTCTT AAATAAAGTT
147951 TTATTGAAAC ACAGCAATGT AAATATGTAAC TCTCATTTGT TTACATATTG
148001 TCTTGGCTG CCTTCATGCT ATAAAAGTAG CACTGAGTAG TGCAGCAGAG
148051 ACCACATGGC CCGCAAACCC TAAGATATTTC ACTATTTGGC TTTTGCAAGA
148101 AAAAGTTGC CTATACTGG CATAGAGGAG CAAAGTGAGG ACTCTGAAGT
148151 TGGAAATGCT GTGTTGGAT TCTGAATCTT CTACTTAATG GCTATATGAC
148201 CTTGTGCAAG TTAATTAGCT TCACTTTCT CTCTATGAAA TAAAAATAAA
148251 CATTGTATCC CCACCCCTGTG CTATCAAATT AGCATTAAAT GAGTAATTCA
148301 TGTAAGGCAC TTAGCTTAGT ATTGGCACA TAGTGAGTAG TCAGTGTGG
148351 CTGTTATTAT TATCCAAAGA ATGAAAGCTC TGTTTGTGT TGATGGACTC
148401 TCAGGGGATG GAGTACCATG GTTATGGCA CAGGCCATGG AGTAGGACAG
148451 AACATTATTAT ATATCCAGC TCTGCCACTC ACCACATGAA TGACTCGGAG
148501 AAGATTAATT AATCTCCCTG AACTTCAGCT TCCTCATGCA TGAAATAGGA
148551 AAAAGAAAATT AAAGAGTTAT TGTAAAGAGT AAATGATAAA ATGCATGTGA
148601 AGTGCCAAGA ATAGAATTTC GAAACATAGTA AACACTCAAT AGGTGATATA
148651 AATACAATTA TAAATAAGAA GAAGAATGGT ACTTTCTAA GTAGTACTAG
148701 CTTCTCAGAA CAAATGACA GTTGGTAGTG ACTACTATGC AAACATCATG
148751 TGAGGTAGGA GGTCTACTT ATCTTAAATA ATGCTCTGGC CACCAAGTTT
148801 TGCATATTCC AGGCACATGT AAATTAATA CACTTTAAA TGGAGTTGGT
148851 TAGACAGCTG TCTAGGCTTT TATCTAGGCC AATAGTCCTT CAAGACCAGG
148901 TACCTTTCTG TACTAACAAAT CCATGACTCT ATGACTGTTC TTAGGTGAAG
148951 TGATAGGTCA AGGAGAACAG CATAACACGTT GAGTCACTCT ATGGACCATC
149001 CGGGAAAGAT CCTCTCTCA TAATAACACG TGGGTACACA GTGATGCTAA
149051 GGAGTTGCC ATATGGGTG AAAATGCTCT CATTGAAAC CCATTCAACA

149101 TCTTCAGGGT TGAGTTCTGT AATGGGATGT AAATCTTCTT TCCTGGGGAG
149151 AAACGGCTGA GGAGACTGGG TGTGTAGGT GGAATACATT AAGGCTGGT
149201 GGGTTTGAGT GCCAGCCAA GAGCACAGCT CTCATTCTCA GTTGGCCTAA
149251 GCTAACAGGG AGTGATCAAG TTCAGTGGAC TGAAGCACAG GGGAGTATTA
149301 CGTATCTTCC AGACCTGTGG ATGCTAGATG GCCAACCTAA TTTAGAGGAA
149351 TATGAAACAA GTAACAGCAC CGTGCAATT TCGTTATTCC CTACCTACCT
149401 CTTTATGAGT TATTGTCAT TATATTAGCA GAAAAATGAG GATTGGAGA
149451 GCCTCTTCTC TCAAGGGGGC TTACATCTCA ATTCAGGTG AAAAGGCATA
149501 AATACACAAA AAGTTACTTG ATAATATAAA ATAATATAAT CAATTCTTC
149551 AGTGCAGAAC ATGTCTGAA AGAAAGATGG GTCAACTTAG TATCCAGAGA
149601 TTAAAATAGG TAAATGACTT GCATTCATTC ATTATTCTC ATATTCTTC
149651 ATGTCCAAAAT ATTGTGTA GTCATTATGG GAACCCCTCA AAGGGATATG
149701 AATAATAATA TAAGCTTTAT GAGGGCAAAG GCATCATCTG TCTTATTTC
149751 CACTCTATTC CACAGTGTCT AGCCCATAGA GGAAAGACAA GGACTGAGTT
149801 AGACATAGAT CTTTATTAA TACTCAGTGT TTAGATGTAT GTAGTTCTA
149851 ACACATTGTTGGACATTGGT GGACCTCTCA ACATGATTTT GGGCTCTAAT
149901 TTATGAAATA CTGCAATCAG ACATTTAGTA GACATCTGTT GGTTTGATAT
149951 GCCCAGCATG CATCTCTCT CTGTTCACAG CACCTTAATT TTCCCTCTGGC
150001 TGGTAGCTTA GTAACGTGGA TAGTTGTTCT GCTTCCCTTG ACCCAGGGC
150051 GGCCCATGCC CAAGCAAGGC TAATCTTGAA CTGTTGAAAC AGTTATCAC
150101 AATGCTGGA GCAATGGTGA GACCTTAAAG AGACTGTCCA TGAAATGCTG
150151 ACATCTAGAT TTCTAGAGCT GCTGCAATTCT GTGCTTATA TGAGGCAC
150201 TTTCAGCTGG GGCTCTCTCA TATCCTTCCA AAATTCTGTT CTTACAAATT
150251 ACAGAACCTA AACTAATAAA GCATGGGTGT TAGATAAAA ATTGATAAGA
150301 CGCACACATT TTTATGTACA TTTAAAAGAT GGGTGGAGAC TTTCAGTTA
150351 TAGCTAGGAG TAGGGAGGTG TAAGGGTCTT TATGAAGGAG ATGGCATTG
150401 AGCTTAACTT TAAAGAATG GAAAGGATCT GCAAAGATCC TTAAAGAAAG
150451 AAAGCAGGAG GCAGGGAGGCT GTGAGGTGCT GGAGCAGGGG CATGAGTGT
150501 GGCCCAGAGC CTACGGCGA GAAACAACGGT AAAAACAGCC ACGTCTGTGC
150551 TGGAACTCAG TGAACACT GACCATCCTA TCTCTGTCGT GCCATTACAC
150601 TTAAGTCAGA TGTTCTGTT CCCATTTCT ACCTTATCCT ACTGAGTCAC
150651 ACAACACCTC CCCTCCATTG TCTCTCATCC ATGGACTGGA CTTGAGCTAT
150701 GGGATGTTAG AGAGGAAAGG TCTTGTGAGA CCAGCTAGGA CTGACCCTCT
150751 TAGGCCAAG TGATGCTAGA GCCCTCCAGG CACCCATGCC ACACATGAAG
150801 TGCCGGATAC CTTAGAAGAG CTCAGTTTA CTCAGAGAGC TATGTGATCT
150851 CTTTCTCTC ACCTGATCT CTACTGCTT CCTCCTTTCC CCCTATACTG
150901 TGTCCACATG GGCTCTCTGT TTCTCAAGCT CTTCAGTCTT GTTCCCTGAGC
150951 CTCATTCTAGA GCCTCTGTT CATTCTCTCT GCTTGAGACT GCTTCTTTAG
151001 CCTTTAGCCT GGCTGGCTCC TTCTTAGGGT TCATTCTCA GCTCCAATGC
151051 TAGTGACACA GAGAGGCTC CCTGACCACATC CTGTCTAAA TAGTCCTGCC
151101 AGTCACTCTC ACATCATCTCC GTTTATTTT CTTTGTAAATA TTTCGAGCAT
151151 CCAAATGGC CTTGTTATT CACATGTCTAT CTCTCTCCCT CTCTAGAGCC
151201 TAAGCTCAA GAGAGCAGAG ACTTATCTT TTATCCAGTG ATGTATAACCC
151251 CTAGCACCC CTTGCTGCCT AGCATACT ACACATTCAG GAAACTTGT
151301 GGATGGGTGA ATGATTAGGC AGAAGAAAGA TCGAGAGAAG AAACAGAAAA
151351 TTCAATCTG TAGGACCTCA CATCCCCAGT GAGTACAAAA GTTCTATTAC
151401 AGGTACTTCA CCAAAACAAA AAAAGTTGA GAAACACTGA TTTAGTTAA
151451 ACTCTGTTAT CCAGACAGGA AAAATGCAGC CCAGAGAGGA GAAGGGGCTT
151501 GTTCACAGAC GTGCTCTTGCATTTCTT CTCACAAATC ATGTCAGGCC
151551 CCTGAAGATT TTATAAGGG AAGCTCCAGT TGATCAGTCT GTTGCCTG
151601 GCCCCCTGCC CTTGGTTACA TATGTCAGCC CACAGGGTGA GTCTAAATT
151651 CAGGACCAAGT GAGCCCAGCC CTGTTCTAAT TCTTAGCCTC GTATGCAGTA
151701 CCACATCTCA TTGGCTTCA ATGCCCTAGTA ATTAAGACCC ATGCTTAATA
151751 ATAAATACAC AAATATGACC TGGGAGGATG GCTTTCTTC CACATCTCC
151801 TTTGCAAGCCA TCTTCAACT GGGCATCAGG GCCTGGATGA AGAAAGTTCT
151851 TGTGACTCTC AAATGAATCC AAAACCAAAG TGAAATGCTA CATTGACACA
151901 TGACACAATC ACCTAATTC TCCAGCCCCG GCAAGGCCCT TGGCAACCTA
151951 GTCCCCACCC ATCTCAACT CTGTCCTAAT CCCGACCCCC AGTCATACTG
152001 GTGTTCTGG AGTTTTCTG TTGTGCCCTT CTCTTTTATC TTGGTGCTT
152051 GGATAAAAGTG GTCCCTCTAT CTAGACACAG GAACAAGGTG CTAAACACTG
152101 TGCCCGCCCT CTGCTAAAGG ACCCAGTTAA CACTGACTAT AATAGCAGTT
152151 ATGATCATTT ATCCTGTTGC TGATCCCTTT ATTACTCTCT CAAATCACCC
152201 TTATTTTCC TTAATGTTAA ACTCACTGAA CACTTGCTTA AGCTCTGTGA
152251 AGGTAGAAAA CATGTCGTC TTGTGAATT GTGGTACCCCC AATTTTCTGG
152301 CAATATTAGT TTCTGCTGCC AATAATATC TGTGAATT ACTAAATAAA
152351 TGATAACATT GTATCTAGTA AATGACAGAC ACCCTGGATG TGTCTCAGAA
152401 TCCTAAGTAA ATGTGATATT GTTAAAGGGC TTGGGATGA TTATATCTA
152451 TTATGGTAAAT TCTTGCATG TCACCATTTAT ATCTACGATA CAAGAGAATA
152501 TAAAAAGGGTGA TGGACAGGCA CTCTTATTGT CCTCTGAGTG ATGGAAATGA
152551 AGCACATCCC TTGATGTTAC AACGTTAGAG TAAGATGATG AAGAATGTGA
152601 TTCCCAACCAA TAAGGATAGA ATTATCCAG GAGGGGAATG AGTGCCTGAA

152651 AGTCCCCCA TTCACACATA CTTTGATCT CCCTCCCTA AAATGAAGCT
 152701 GTCTGTAC CTCATTATCT GCTATTTACA ATGAGGCTGC CACATCCCC
 152751 GGGACAGGAG CCAAGGAGAA ATGTCGGTGT GAGAGGCCTT AAATGAAGTG
 152801 ACAATAAAA AGGAGTTGTT AATGCCAGGA GTTCCCTCCC TGGGAGACAG
 152851 CTGTCAGGGC CAGTACCCAG GGCTGGGAGA TTATTGATA CTAAGTGGAT
 152901 GGTGCCCTAA CCAGGAGTGA TTATCAAAGA GGTTGAGTG AGGTGAGGAT
 152951 AGAATTGGAC AGCCCACCC ATGCAGTGTG TGTTTTTCC TGCTCTCACT
 153001 GGTTCTGGC CTCCTGCTTC CCCAAGAGGG AATTCCCTGGC CTCGTTTTT
 153051 ACTTACTCTG ATTGTTGGAC ACGCTCTGCT ACAGAGTTTC TTGGAGCCAG
 153101 GGCCCTCAGA ATCTGACACT CTGGCAGGGC TCCCTGAATG CTCTCTCAT
 153151 CTCTGCCAGG CCTTGCTGT TGCTCTTC TCTACCCATA TACAGTACTC
 153201 TTATGACA TGTAACTGTA CCAAAACCTC TCTCCTGGCT GATTCCCTCT
 153251 TATCTTCAG TGTCAAAAGCT GGCACCTTCCT CTGGAAGCT TTCTTTGAGG
 153301 TCCCCAAAGG ATGGGGTTAG GTGTCCTGC CGCTGAACT CATCCTAAC
 153351 ATAGCATGTA GACTGAATTG CTATGCCATA CATAGTTGTC AGTCTCTCC
 153401 ATTGCAAAG TGACAATCCC AAAGTGGTTG GGATGGCT GGTTTACCC
 153451 TGTATCTCCA TTGCTTAACA TAGTGTCTTC ACAAGTGCCA GATACTGGGT
 153501 GTCGAATGGT GGGTGGATGG ATAGATGGAC CAAAGAATAG GTGTGTATGT
 153551 GTATAGACTT CCCAGGGATG AGACAGGAAT ACATCAAACA TACCACTCAA
 153601 TTATTTTGC TTATATTCA ATAGATTCTA ATGTAGTAAT GCCTCTTTAT
 153651 CTGGCATCAG GGGAAAGACAG TGTGCTACAT GAGGAGATT TCCAGAAACT
 153701 GAAGCTGACC CATGCTCCAA GACTATTCA AACATCCATG ACATATCACA
 153751 GACATTAAGG ACTCAAGCTC TGTGCTCAGA CTGGTAGAGG TCATCTCTCA
 153801 ACTTGCTCTG TGCTGTTCT AGACCTCACT TCTCCAATTG GAAACCCACC
 153851 TCAGGAAATG AAAGGAGTTA ATGTAGAGAA ATGTCTTGG CACAGTGTCT
 153901 GGCACATTGGC AGGTGTGAA GTATCAGCTC TTAATTATTA CTATCAGAAA
 153951 GCATTACAGG CCACTCACAG TGGCTCACAC CTGTAATCCC AGCACTTTAA
 154001 GAGGCTGAGG TGGGAGGATC GCTTGAGACC AGCAGTTCAA GACCAGCTTG
 154051 CGAACATCAA TGAGATCCCA ACTCTACAGT TTGGAGCTGC AGTGANCCAT
 154101 GATGCCACCA CTGCACTCCA GCCCAGGTGA CGGAGCCAGA CCCTGTTCA
 154151 GAAAAAAA AAAACAAAGA AGAAGAAGAG GAAGAAAGAG AACACCATAT
 154201 TCAAGTGCCT TCTAAATGGC AAATACTGCG TTTCATCCCA GCAACATGAT
 154251 GGAAGTCTGT GCATTAACCC AGTACACACA GAGTTCTGAT TCTGAAAAAT
 154301 GCCCCATCTC TTCTCTCTA CTTGTCATAT CTGACAATGT AGTCTCCATC
 154351 TCTGGCTCCC TTCTGACTCT GCCTCTTTCT ATCTCTCTAC TGGGTAACCT
 154401 ATTCACTATAG CAGGTTAAAA GTTGTGTCCTT AACACTTAAG ACTCCAAATG
 154451 CATCTATTCA GAAGTCACAA AGGTAATCT GTTCAGGAAA GTGAGATATG
 154501 GGCTGAGGCA CAACTCTGC AGAGTAGTGA TCTTGCAAAG GAGGTAAGAAA
 154551 AAGCAGGCTG CAGGAGGAG GGGGACAGTG CAGGATCCCA GGATTTGTT
 154601 ACAAGGGAAT CCAAGAACTC AGAGACTTAC CTGCTTAAGT GATTTGAAAAA
 154651 AGTCACTGG GGTTGCTTAG AATTGACTA AATAACTAAA ATATTGTCGA
 154701 ATCAGTAAAC ATTTCCAAT CAATTAGACT AGACTCTAGA ATGTCAGAGT
 154751 CTGAAAGGGC ATTAAGCATT ATAGAGATCA AACATCATT TCACAGATGG
 154801 GAAAGCTGAG GCCTAGGAGA GCCTGGGATT TACTTAAAGT CATAACAAGTA
 154851 CTCTGTAATG ATAAAACCAA AAAGAGAATC GTCCAGGTCT TCTGACAGCT
 154901 AGCCTAGTAC TTTGTCACA GAACCAGT TTCTCTTCTG ATTGAATATT
 154951 GGTTGTGACA GATTCAAGT AGATATAATA CCTCACAAC ACTAATTATA
 155001 TTATCAACAA TTAAACCAAT GACTGCCCTC TCCCACAGGC CTTGGGCTTA
 155051 TAGGCTCTGT CTGCTGTTT CTGCTCTCTC CTCTTCTTT TACTTCTCT
 155101 CTCTCTGCTA TTGCTTAGGT TTGGCTGAAG TGTAGAAATG GTCTGACAGT
 155151 CAGGCACTGA GCAACTCTGG GAGCCAGGGT TCACTCAAGT AAATCCAGGC
 155201 CAGGCTACCT CCAAGCCATG CTCTTTAGG GAGTAGTGCCT TAAATGCACC
 155251 CTCTTAGCCT TAGAGGAGAA AGCACTCTGT TTAAGGTAAG AGATGTTGCT
 155301 AGAAGGGAA AATGAGGAGA TAATTGAGAAG GGGAAAATGT CCTGGCTCC
 155351 TGTGCTCTA AGGATTGTT GTGCTCTGCCT GCTCCCATTT CGTCCACCCCC
 155401 CATCTCACCC TTCTCTACTT CACTCTAAA GTCTAGCAA GAAACACCAT
 155451 CCATGAGGGC CCCAGAGGCC CAACTAAATG TGTGAAACCA AGTAGGTGAC
 155501 ATGAGGGAAT AGATCTGGAT CATAAGATTT ATATCCTGTA GGATAATATT
 155551 TTATTGCAGC AAGGGGAGAG AAGAGATCCT AAAAATACTG TAGAGAGTAT
 155601 ATTATAATAT TTTAATGAGG TTTATGTCCT CCCCATATAC ACTTCACCCCT
 155651 GGATGATGGA TTGTCATTT TGACAAATCT ATATTTAACCA TTGGGAGAAT
 155701 AATATGTCAT GTATGCCCTC TTGTTAGAGAA ATCATATTTA TGGAAATCTT
 155751 TATTCTAGTT ATTATAATAG ACATTTAAAG ACAGTGCCTA TTGTGGGCTG
 155801 TGGATAGATA GAGTGTCTC ATTAGGGTGG AGGAGAAAAT AGTGTGAGTG
 155851 GCAGAGGATA AATGCTTACCT TTAGAAGACA GCAACCCAGG CAGGGGACCA
 155901 ACTAGTTCA GGTGACCCAA CAGTCACATC TCTGTTGGG TTCAGCTCCT
 155951 CCTCAGCCCC TGCTGCAGGT CATATGCCCT CATCAAGCAC TCATCATTCA
 156001 TTATTTTATC AAATATTAT TAAGCATCTA CCATGTCCCA GACACTCTGC
 156051 TGGCTTTGG GCACAAAGAA GCATGTCCCTA ATTTTCAGGG AATTCAACATT
 156101 GACTAAACAA GCCACACATA TATACAAATA AACAAAGAAA ATTATTTAG
 156151 ATTAATTAAA GAATGGAAA TAAGACAGAG TGATGTGATA CAGACTGATG

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156201 AGGGGTCACT ATTTAGAAGA GGTGATGAAG CAAGATCTAT ACAGAGAGGT
 156251 GAGATTGGG CTGAGGCACA ACTGCTACAA AGGAGTGTG TTTGCAAAGA
 156301 GGTAAGGGAA GAGCATTGCA GGAAGGGAGGG GAACAGCTGG TGCAGAGTCT
 156351 CCCATGCAGA ATGAGCTTGG AGCCCAGAGG AAGAGAGTGA AAGCCAGTGT
 156401 GGCTACAGCA GGCAGCAAGG AGAACGCGT TGTAAGTTAG GTGAAGTCAG
 156451 AGGAGCAGGC TATTGATGCT CTGTTGATG GTCAGATGTT GAGACTTTT
 156501 CTGTTGCAA TGGGAAACT TTGAGTGGAT TTGACAAGG AGAAAAGACA
 156551 ATGTGTTTG CTTGTTGTT CTTGTTGTT TAAATAAGAT CTCTCTGGCT
 156601 TCTGGTAGA GAAGTGAATT TGTCACTGAA AACCAAATGT CCTAAAGCTC
 156651 AAGGCCATGA ACACCACCTT CAGATACCGAG GAGGGCTATA GAGTGGGTC
 156701 AGAGCAAGAA TTGTTGAAA CCAGAACATC AGTAACATAGA AGTATGCAAG
 156751 CAGATGTTAA TGATCACCTG CCAGGTTTCC TGCAAGATGGT ATGCTGGTT
 156801 TCAGTGGGAG TAGGACAGAT GGGTTATATC GTTCAGCTGC AATCTTTAAG
 156851 AGATTATGAC CTTTAAAGCC CATTTCCTC AGGGACTAAC AGAAAACGGG
 156901 GACTCACAGT AGACAAATTAG GTACCACTGG TTAATTGCA TCTTTATTGC
 156951 AGCATGGGCC AAAAGATTTT CAATAACATT TCAAAAGTAT TCACCAAAAA
 157001 AAGGTCTTGG AGGCAAAATAG ATTTGACAAA ATCTGGATA AAAATGGGTA
 157051 GAATTCCCTA CAATCTTTA TGCAAGCTAAT GTGAAGTATG AAACCTCTAA
 157101 ACAGGGACAA AGTATGCACC ATTTCCCAA TGATTTGAC CAAAGAAGAC
 157151 TTATTTTTA AGGAGCATCT TGTGGGGCTA TAGTTTCATG AAACCTCTG
 157201 GGCATGGCCT GCACATCTGTT ATTGGAGATC CCATACACAG TGGCAATGTG
 157251 GGGTTCTGGA AACAGGTGAT ATGGTAAAAA GAGTAAAGGA TCTAAGAGCA
 157301 TTAACCTTTT TATCTTAAAAA GAAAAAAATA ATAATACCTA AGTCACAAGG
 157351 ATGTGATGAG GACTAAATAG CCTAATATAT GTAANAAGGA CCACAAAGCA
 157401 CTCTAAATAA CTGTTTCAT GACAAGGATG AATGACTTTC CTCACCATCC
 157451 ACCTGGAAAG GGCAATTGGT AGGCATTGAA GATGGCCTTG GGGTTGGTCT
 157501 CACTGGGCCA AAGATTATGA ACTCTCATCC TATATCATAT AGTAAAACAA
 157551 AGTTTGGAGG CTGACTGACT TGGAGTTAA TCCCATGACC TTGGTCTTAT
 157601 TAGCATCGA TTTTAAATTAG AAGATTAATC AACCACAAAC CAGGATTGGC
 157651 AACTGCATG GGATTCTACA GAATCGGTCC TGTTGGGTATG TTCTCACAGC
 157701 TAACGTATTA CTATGGCTGA TACACTGGGG GGTCTGAAAA TCAGCTAGCA
 157751 AGATGTACAA GCACAAAGTG AACATTAGCA GACAAATGAA CACTGAGAGT
 157801 TAAGGGCTAG ACTGGGAAAAA TCGACACTTG TTTCTTAA CGTGTATTAG
 157851 CAGCAATAGC TGTTCTTC TGTTAGCACC TTTTTATGCT TTGCTTTAA
 157901 TTGATAGACA ATGTGGGGG AAGATCGTTA GATTAAGAGT CAAGAATATC
 157951 TGCCCAAGTC ATATGCTCTA GCTGTGCTAC CTGAAATATG TTCATTAAT
 158001 TTCTGAGCTT TGTTCTCCTC CCTTTAAAAA AATGACCCAG TCATCCCTT
 158051 CTAGCCTCAA TAGGGTCATT GTAGAGACCA AGTAAGGTA TAGATGAAAG
 158101 TGCTTATAT ACATGGCTAC TGTAATTAA ACCATGACA ACTTCTGGCT
 158151 TCTAATAGAT ATCTAATAAA ATTGGATTTA CACAGATGAA TGAGGCATCG
 158201 AACAGGTGAA TGTTGAGTG GGGTAGTTAG ATTGGGTAGGA TGGATGGACA
 158251 GTTGGATAGA CTGGTGTGTC GAAAGGATGA ATGGATGGAT TGGTTTGTG
 158301 GATGGGTAGA TGGATAGATG ACAGTTGGGT GGATAATTGA TGGGTTGGAT
 158351 GGATGAACTA GTGGATGGAT TCATTTGGG GTCATCTGAC CACTTTTGC
 158401 AGTCTTCTAT TCATTAATCC TTCTCTCTC TTGAGTCTG TTCCCAGTTC
 158451 TCCAAAGGAG TCTATGCCAT CTTGGGTTT TATGAACGTA GGACTGTCAA
 158501 CATGCTGACC TCCTTTGTG GGGCCCTCCA CGTCTGCTTC ATTACGCCA
 158551 GCTTTCCCGT TGATACATCC AATCAGTTTG TCCTTCAGCT GCGCCCTGAA
 158601 CTGCAGGTG CCCCCATCG CATCATTGAC CATTACAAGT GGCAGAAATT
 158651 TGTCTACATT TATGATGCCG ACCGGGGTAA GCCAAGGGTT AGGGGAGGG
 158701 GACTTTGAG GGTGGAGAG AAAATTACCA GCAGAAAGGA GAATGATGCC
 158751 TCACTGCTTC CCTGAAAAAT ATGGGAAAAT TATCCAAAAT GCTTTATTTC
 158801 TGAGAAATCT GACTGATTGTCAGTACATT ACCTCTAATT CAGTTGGAA
 158851 ACGCATTCTG AGAATAATTC TCTTAATGCA CCATGTCACT CTACAGCTCA
 158901 CTAAGCTTC ATGCTCTCTG AGTCCAAACT CAATGCAAAA GGACCTCAGA
 158951 CTTGGAGTC AGGCAGATCT GGATCTGAAA CCTAGGTTCT GTCCTCTCCA
 159001 GCTGTTGAC TTTGGACAAA CTCTCTCTGC CTCATTTC GCACTTATAT
 159051 AATGGGGATA AAATTCTCTA TGCTTCTATT TTCTCATGTC TATAATGAG
 159101 ATAAAAACAA TGTCATCTT ATAAAGGTTT TGAGGAACTG AATGAGATGA
 159151 CTATGAAGTG TTCAGTCCT GCAACATAGT AAAAAACTCAA AATTCTTTCT
 159201 CTGTTTCTAGA TGTTATCATC ATCATCATCC TCCCTCATCAT AATCTTCATC
 159251 CTTCTCTGGG CTTTCTATT CTCTCTCTT TGAAATTAAAC ATCACATTT
 159301 CCAATGTT TCTATACATT TTCTCTCTA TGCTTTACT CATGTTATT
 159351 CAGTTCTG GAATGCACTT CCCTCTCCA ATTACATCT GTAAATCCTT
 159401 CTCTCTTTT GCAGGATGTC CCTATTCCCC AATTCTGTGG ATGGGAGCAC
 159451 TCTCTCCAAC TCCCATGATG TTTGCTTGT ACTGTCCTAC CTTCTCATG
 159501 TATACTAAAT AGTCTTGAA TAATTATTAC ACTACTGGTG TAAACAAATA
 159551 AATGGGTAC GCAGAACCTG AAAGGTGAGA CAGAGGAGTA CAGTACTGAT
 159601 GTGGTTGCCT GCAGGGAGTC TTAGAAAAACT TTGAGTTGG AGAGAGGTTT
 159651 GTGAAAGTGA TTTTCAGGC AGTAGGCAG GCGTCGTTCA GATGGGAAGG
 159701 AGCCAACAGA AGAAACCCAGG AACACCCATT TTTCTTTGAT TTTCTCTTCA

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159751 CTGTCCCCAC TTTGATGACT TCCCTTCTCA GACTGCGACT ATTGCAGGG
159801 TCACCTGGAA GTCTATTCA GGACAGCTT GCAGCATAAT GTAGCTGGAG
159851 GCCTGGAAAGT AATAAAGCCA GAAAAATGTA CCTTGCTTG TGGGAGATCA
159901 TCTCTGGGGT CAGCAGAAGC ACCCACACTC TCAAAAGAGC TCCACCTACC
159951 TCAGAACTCA GAGCTCAGAG CCCTGCCGTT TGTCAGCTGT GTGACCTTGG
160001 ACTAAATGACT AAACTCTCT AAGCTCTAAT TTCCACACTA TAAAATAGGG
160051 ATAATAATAG TATCTACCTT GAAAGATTAA GTGGATTAAA ACCAGTAGAA
160101 CAGTGCAGA CACAGACTAC ATTTCTAGTA AATGTTGGTC TCAAACACTAC
160151 CAAACAACCTT GCACTGAAAA CGAAACAAAG ATAGGAAGGC ATAGCAGAAC
160201 CAATCTGCAG ATGATTCTTG AGGCCAGATA CCATATTGGT CACTGTGGAA
160251 GAGGTTAACT GTGTTACTGA AAGTCAGAAA TGACATACAT ACAAAAAATT
160301 AATCCATGCA AGATCAAAT AATATCTGTG AATAATTAAAT AATGACACCC
160351 CCCCCCAAG ATGTTCATGT TGCAATCTC AGAACCTGCA AATATGTCTA
160401 TGTTACATGG CAAAGGAAAA TGAAGGCTGC AGTTGGGATT AAGGTTGCTA
160451 AACTATTGAC CTTTAATAGG GTAATTATGCC TGATTATGT TGGGGGGACA
160501 CAATGTAATC ACAAGGCTCT TAAATGTGGG AAGTTGGAGT CAGAAGACTC
160551 AGTGTAGAG TGTTGCAATG TGAGAAAGAC GACCACATT ACTGGCTTG
160601 AAGATGGAAG GGGCCATATG CCAAGAAATG CAGGTAGCCT CTAGAAGTTG
160651 GAAAGGCAAG AGAGTGGATT CTTCCCTAGA ACCTTTAGAC ACCAACACAG
160701 CCCTGCTGAC ACCTTGATTT TAGCTGGG CACCTATCTC ATGCATCTTA
160751 CCTCAAGAAC TGTAAGATAG TACATTTGTG TTGTTTAAAG CCAGTAAGTG
160801 TGTGATAACT TGTTACAGCA GCAGTAGGAA ACTAATACAC CATCTAATTG
160851 TCCAAGAAGA AAACAAAGCAG CATTGAGTAA TGGCCTCTCT ACTCATTAG
160901 CTATAGATCA GAAGAGAGTA GTTTAATTCA GGACACATT TATTTATTAA
160951 TTTTTTATT TAGTTAGTTA GTTAGTTGAG ACAGAGTTTC ACTCTTGTC
161001 CCCAGGCTGG AGTGCAATGG CACGATGTGG GCTCACTGCA ACCTCTGCCT
161051 CCCAGGTTCA AGCAATTCTC CTGCTCTCAGC CTACCAAGGTA GCTGGGATT
161101 CAGGTACCTG CCACCATGCG TGGCTAATT TTGTAATTTT TTTTAGTAGA
161151 GATGGGGTTT CATCATGTTT GCCAGGCTGC TCTCAAACCTC CTGACCTCAG
161201 GTGATCACCAC CACTCGGAC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC
161251 CACTGGCCCT GGCTGCCAG GACACATATT AAACACCTAC TGTGTGAGAG
161301 ACAAAAGTATT AGGTATTAAA GATACTATAT TGAACATTCA CAAATTGAT
161351 CAGCAGTTAT TAGGTGACCA TTTAGATGCT AGGTTGGCAC ATTTAATAAG
161401 CAGTTACTGA GTGCCGAAATA AAACTAACAG CTAATATTAA TAAAACCTT
161451 GCAGGTGTCAGG GCCTGTGCTA TGTATCAAAC ATTCCTCACTT AATCCCTCATA
161501 ATGACATTAT GAGGTGAGCA TTATTTACAC CACACTTAC CTTTGAAGAA
161551 ACTAAAGTTT GAAGAGGCTA ATGAGCCTGC ACAAGGCCAT TTAGCCATAT
161601 GTTGGATTG AGCTCAGAT GTTTTTAA TCACTAGTT TACCATCTAT
161651 GTTCAGAAAC ACAGTGTCTG ATCTCACAGA GTTCAGAGTT TTGCAGCCAG
161701 AGAAAAGTAG AACTGAGTTT GGCAGAAGAG TGGGTTTGGG GGTAGCCAGG
161751 GGAGGTAGGT GCCTGTGTTGG AGTGGGTGGT GCCCACAAAT CCTGACTGTC
161801 ATTCCTCTTC TACTCTACTG AACTTTAGGC TTATCCGTCC TGCAGAAAGT
161851 CCTGGATACA GCTGCTGAGA AGAACTGGCA GTTGACAGCA GTCAACATCT
161901 TGACAACACCAGGAGGGAA TACCGGATGC TCTTTCAGGA CCTGGAGAAG
161951 AAAAAGGAGC GGCTGTGGT GTTGGACTGT GAATCAGAAC GCCTCAATGC
162001 TATCTTGGGC CAGGTAGTGA AAGCAGCAAG GGCTCAGGGT GGGTGCAGGA
162051 GGTGATTCAAG GAATAGCCAG ACACACTTTT GCCTTGGGTG TTATAAAGAG
162101 GGTTATAAAG AGGGTTCTTG ACTAGGTGAG ACTAAAAGAC CTCTATCTCA
162151 TTTCTATATA TTCACAAATTT TAATTCTGA AATAGCACAAC ACAATGGGAG
162201 CCTTGACATCA GGGCTTCAAA TGTTCTCGAC ACCTGTTAAC TCCAATGTAT
162251 CCCTCTATG TTTAAAAAAA AAAAATGCTG GATGCACTGG CTCAGGCCTG
162301 TAATCTCAGC ACTTTGGGAG ACTGAGGCAG CGGGATCACC TGAGGTCA
162351 AGTTCAAGAC CAGCCTAGCC AACATGGTGA AACCTGTCT CCACTAAAAA
162401 AAAAAAAAAA AAAAAAAAT TTAGCTGGT GTCTGGCAT GTACCCATAA
162451 TCCCAGCTAC TCAGGGGGT GAGCAGTGA GCCAGGAGAA TCCCTTGAC
162501 CTGGGGAGGTG GAGGTGTCAG TGAGCCAAGA TTGTGCTACT GCACTCCAGC
162551 CTAGGCAACAA GAGCAAGACT CCATCTCGAA AAAATAATAAA AAATAATAAT
162601 GATAAAATTAC ATTCCATTAAAG AGACTTTATG AAATGTTATC ATATTAGGAA
162651 CACAGCTTAT AGGGCCAAAT TTCTGGGTTG GACTCTGGAC TCTGTCACTC
162701 ATGATCCAGG GTTGGCATC TCATTCTTT CACCTTCTTA ACTGTTTGT
162751 AAGGCTAAGG AAGCAGCAGC CACCTTTATT TCCATTGTTT CCCTGAACAT
162801 GCCCTTCCCT TTGAGAAATC AATTGACAGT ACATTCTCT ATAAAACAGGC
162851 ATTGTAACCTT CAACAGCTT GAGCTAGATC TCTCTAAACT GTGCTTCCCC
162901 TGGTCTCAAAC ACAAAAGCCC ATGCCACCA CAGAATTAGG ATTTTTGT
162951 GATTCTTAT CTTTTAAAC TACATTTATG TATTCAAGATT CAGAGCTAGC
163001 AAGGTTAGCAG ACGTTGCAAT AACTTTGAA CAATGTCTA CAATAAAAATT
163051 GATAGTTTA GGTACTTGAC AACATGACAA AGTTGTTAA TGGCCTTCAA
163101 GACCCCTGGG GCCCTCACAG AGAATCTTGG TACTAGGACA GCTATTACTC
163151 AGAGGCCCTCA GCAATAGAAC ACAGACAGAG TTGAAATGTT ATGGATTCTT
163201 TAAGGCACTA ACTGTTCTAC TTTATGAAGT ACAAAATTGG CCTTCCCTCT
163251 TGGAAGAGA AACCCAGCAA AACTTGTCC ATTGAGATGG AAGTTCTCTG

163301 GGCCGGAGTC AGGGATTGTA ATTGCAGTTT TCAATTCAAGG CAGGATAAGA
 163351 TAATAGTTAA GAGCAGAGAT AAAACCAGAC TGGCTAGGGT TCAAATCCA
 163401 GCTCTAGTAT TTACTGGCTT TGTGACCTTG ACCAGGTTT TAATCTTCT
 163451 ACATCTCAAG TTCTTGATCT GTAAAATGGG CATCATCATC ATAATAATAG
 163501 CCACTTTAG AGGGCTCTTG TGAGAATTAA AAGAATCAAT ATATGTGAAG
 163551 CACTTAGAAC AGAGCTCGCC CCACAGTAAG TGGTACAAGC AAGCATTG
 163601 CTATTTTGC TATTCCTAGT GCCTACTAGG ACCAGCTCT TGAGTCATT
 163651 TCTTCTTGG GCATAAGTGA ATCCGCTGT AAAATGTGAA TGAAGGCCTC
 163701 TGTTCTATAA AACTGATAAA AAGGCAAGAT AACATAGTCG ATGGAAAAAG
 163751 TGCCAAATGA TAATGACATA TTAATAGACA GATGACCTAT TGTATATTGT
 163801 TCTATGGTAC AGACAGTAGC TATTACTACT ATTTTTTAG TGTGTATGGT
 163851 ATACCAGATA CTATGCCAAG ACCTTCCCCT GCATAATCCT ACTTCATTCC
 163901 CACATCAACT TTGTAAAACA GCTTTTTCA ATTCCCCTAT TTTATAGATG
 163951 AAGAAAAGAG AGATTATAC TGCCCAACAT CTCACAGCTA GCATATGATA
 164001 AAAGCAGGAA GTCAAACCTA TCTGGTCTG GCCAAAGAAC CTAGCTCTT
 164051 AAAATGCAA CTTTCTGCT TCTGCTATCT ATAATTAACT CCTCTCTCAA
 164101 AGGGCAAACT TGGCTTTGT AAAGAAGTGA CCCGTTTGT TGGGTATTTT
 164151 AGATTGTAGC ATATTGACAT TTTTAAAT TGTTTCATTG ATCTATTTG
 164201 AAAAGTAAGA CCAAAGAGTT GAAAGGATTT TACAGATCAC TTGATTCTT
 164251 GCTTATGCTT ACATTTATA GATAGAATGA CTGACAGTC AATTGATTAA
 164301 GTTATTTGCC TTAGAACAAAT AATGAATGAC AGTAATGAGC CTACAATTAA
 164351 TATCTCTGAC TTACAATCTC ACACCTAGCA TCATCCTGGA CTATCTCAC
 164401 TTCAGTAAC GGGAACGTAC CTGGGATACA GTTACATTCA GTAACTGCAT
 164451 ACAGTCTAAC ACAAAATTTT CCACCTAATC TGAGGAAAAA AACAGTGA
 164501 CAAAATTCCA AATAGGGAAT TAACTGCCCT TGTCGTCTC CAGCCCCCAC
 164551 CCAACTAAAA TCTAAGCTCG ACGATGCCAG GGATTTTGT TTTATTTCT
 164601 TCCCTGCTGA GTCCACAAATG CTTGGGATAG TGCTTGACAC CAAATAAAGT
 164651 ATTCAATACA TCTCTTCAG TGAATTAAA GAATAAGGAA TCAATGAAGC
 164701 CTCTAAGAAA GTTCTTAAAT GTAAGATAAA TCTGGATTTC TATAGATAGC
 164751 CATTGGCTGG ATAAGAGCCT TTAAGATGGA GAAAAGGCA TGTCAGGAGG
 164801 CCCAGAGGGC ATGTGAGGGC TGGGTTTCA ACTGCAGTT TGCAAGGCTGA
 164851 GTGATGGATG CTGAGCGTCC ACTGGAGAGG ATGGCAGGAA GATAAACACA
 164901 CAATCAAGAA TATCCTTGGAA AACCATTTAGA AAGAGTTTAG GGTTTATTCT
 164951 GTAAACAAATG GGGAGTCAGT GAAGGTTTAG GAGCAAGGAA CAGGATTATT
 165001 AGAATATAAT ACTTTATCAA TATATGATGC CAAAGCATAT AAAACAGTC
 165051 TTAAGCACAA AATTAGTTAG AAGTGAGAAT AGACCAAGGAC CTGTTGAGGT
 165101 TATCCATCAC ATCCCCCTAT GTTATTGTCT TCATGGTGT TGTAACCTGCT
 165151 GAAATCTTGT TCATTATATCT ATTATATATAT TGACCATCTG GCACCCCTACT
 165201 AAAATGTTAA CTCAACTCAA TGAGGGCACA GAGACCTTGC CTCACCTGCT
 165251 CAATGCTGTT TCCCCAGCAC ATAGCATAGT GCTTGGCATA TAATTTATGT
 165301 TAAATAAAATG TTGTTGAAT GGATTAATTAA GTTAATCATA GAGGGTTTA
 165351 CAGGGAGTT GAGATTGGAG CTCAGCCATT AAGGATACGA ACAATCAGAG
 165401 AGAATGGGAG AGGCCATTCA GACACAAATA TTGTGAATGAG AGGCAATGCA
 165451 TTGGGAATGA GTCTTGAAGT AATGGGGGTC AGTGGAGGTGA TGGACCCCT
 165501 GTGAAATTGTC TTCTTACATT TATAACACCT TTCTCAGTT GTTACCTGTT
 165551 ATATATTAT CCGTTCACCT ATTTATTATG GATCTCCTCT CAATGAAGTG
 165601 TAACCTCAA GAGGGCAAGC ACCATGCTTC TTTCACCTTT CCACTGTGTT
 165651 GCCAATAGTG CTTCACCCAT AGCAAGCTCT TAATACATAT TTGTGAAGG
 165701 AAGGTATTAG AGGAGGGAAG GTCAATGTAT AGGTTGGGA ATAGATAGAT
 165751 GGGAGGTG GTATCAGGTT GGATCATATG AAATTGCCAG TTTTTATAAG
 165801 TCACAAAGTCA TCAGTTATCA GCTGTTTCCCT TTGTTTCAAT TTGTACTTTC
 165851 ATCTGTGGG GACAATATTT CTCCATTGCC TGAAATGTGGT TGGTTTAA
 165901 ATATCATGTC TTTGCTGTT TGTTTATT AGAAGCTGAA TAGGTTCTT
 165951 ATAAAGGTGT CTCATTGTTG AAAAGGCAGC AAACCATTTG ACAAGCAGAT
 166001 GAAAAGTAA TGAAGAATTA TTAATAAAAC TATCATCCCA ATAGTATTG
 166051 AGCTCCGTGG TCTGGAAATT CACAATCTAA CCACTATTTC AAAGAATTCA
 166101 TTGTGTGTC TTGCAATTAA TTATCCCCCA CATAAAAAAA CATGAGTCAC
 166151 TATGCCACATA CATCCAATTAA AGTAGATGTC TGAAATGTGGA TTTTAATAC
 166201 CTTGAAAATT TATTCAGTTA GAGAAGAAGC CCAAGTGCTT ATCATCTGTT
 166251 ATATGTCTCC TTGCAACAGT GCAGGGAGAG AGACACCGAG CAGAGTACAC
 166301 TAACCCCAAT TTGATGATTA AAAAAAATAG GGAATTAGAT CTAGTTAAC
 166351 TGCAGGCTGA GCTAGATCTA AAACCAAGGT CTGTAGTCTT AACCAATTCA
 166401 TATTAGGTGT GTCTCTGCC CAAGCAAAC TCTGGGCAGT TCTTCCACA
 166451 AATATTTTCTACCTGTA TGATTAGGGA TAGTCTGCT TTTGGGATAA
 166501 AAGGGTATTC ATTGACACTG GTTCTTAATG ATTAACCATA ATCAAACATC
 166551 AAATGGAAAA GTTCACAGGA GTCAGGTCCC TGCCCTGATA CTGCCACCA
 166601 GCTACTATCA GATCTGGGCA AAACATTTC CCTCTGTGGG TCTTGACTTC
 166651 CTATCTGTAC ACTGAGAGTT TGGACCAGAT GATCCTAACT TTCCCTTCCA
 166701 GCTCTAAAGT TGGGCAATCC ATTAATGTCT GAGTACCTAA CTGATTGGG
 166751 GAGGAAGGCA CAAAATTCAG AAAAAAGAAAG AAGAGCATCT ATATATGGTT
 166801 CATGCAAGGA ATTGAAGGTG AAGTCATCCA CATACCCATC TGACCATTCA

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166851 TCCACCATCC ATCTATTAAC TCATCTGTT TTCCAATCAG CGAATATTGT
166901 CATGACAGAT TTCATGCAAC ATAAAATTCC CACCTAAAGA AGAATCTCCA
166951 CATAACAAGGA AGGTTTATGA AAGAAAAGAAC GCAGTGAGCA TTTCAGATGG
167001 GTCCTGGGG TTACAGTAAC ACCACTCTAC CCTTGGAAATC AGACAAAAC
167051 GATTTCAAAT TCTCTATCTG CCACCTAGTA GCTGTAAGAT TACAACCTAC
167101 AGAGGTTATA TAATAGGCAG TCCATGCCA TTCCCTTATT GTAAAATAAG
167151 GATGCTAACCA ATGCCACCAT CATTGGATGC TTGGGATATT GTAGTCTAG
167201 TACTTAGGGT AGGGCACATT GTAAGCACTC GATATCAGCT GCCGTTATT
167251 CTGTTGTTG CTTGGCTTTA ACTGTTAGTA TGATTAATGA GTCTCCACCT
167301 ATTATGTTT GTAGATTATA AAGCTAGAGA AGAATGGCAT CGGCTACCC
167351 TACATTCTG CAAATCTGGT GAGTAGAGCA CTGCAGGCTC TCAGCTCAAG
167401 TCCCTTCCAG GTTGGGGCC CTACCTTGCT TCTGTTGTCCT CGGCTGATG
167451 TGAACGTGAGT GGTTGGAAAGG GGCAATTCTAG GGCTGTAATA ATGAGTCTTG
167501 GCAAACTAC TACCTTATCT TCTCCACATC CCACCTCATCA AACCCACAACA
167551 CACTATTCA GAACTCTAA CCTCCCTTGG AAGAGAGGAT ACTGGTGGGC
167601 ACGGCTTAT CATCTTCACA ATTCCAGCTT TAATTGGCTC TGCCCCTTGG
167651 CAATAGGGAC AAAATCACCA CATCTTGAA TTAATGCAAG ATGTCTTGAT
167701 CTTACTGGTT TGGGCTCTCC ATTTGACCC CAGTGATAGT TTTACTTCTT
167751 ATAAATACAT TTACATCATA ATTACACTAG TATTGACAAA ATTTTAACCA
167801 GAAACAACTT CCCAGCATGA ACAATTATT GTCCATTAG TTTATATTCA
167851 CTTTTCTATA TGGCATAGAT AAGTTGTTT TAAAATATAT ATATATATAT
167901 ATTTGTTTA ATGTACTACA GATCATTGTA TTGAGTGCTA CTGTTTTTA
167951 TATTACAAAG AAAACAACTC ATCAAATCAT TTTTGATATA TATTAATTT
168001 TACCTAGTAG CACATACTAT TATGAGTTT CTTTGATAC CATTATTTCT
168051 GTCAAGTCTA TTTTTCTGG GTCATGTTT GTACCTCCAC CTTTTTTGTC
168101 ATGAAGTTA ATTCTCTAG CTTTCTATC CAAAGCCAAA TGTATTTTA
168151 TTTGGTGTGTT AGCCCATT TTAAGGCTT TATTGAGACA TATTTTATAA
168201 AGCACACAAAT TCATCCATT AAAGTGTACA ATAAATGGT TTTCAATATA
168251 TTCACAAAGT TATGAAACCA TCACCCAGAT CTATTAA AATTCTTCAT
168301 CACTCTAGG AGAAATCCCT TACCTATTAG CAATGACTCC TTATCATCCC
168351 CTAAGCTCCT CCAGCCCTAG GCAACCATT ATTACTTTT TATCCGTATG
168401 TATTTGCCCG TTTGGAGCAT GTCATATATG TGAATCATA CAATATGTGG
168451 TCATTTGTAA TTGACTTCTT TCACCTAGCA TAACATTTC AAGTTTCACC
168501 CATTTGCAG CATGTATCAG TACTGTGATT CTTTTTATGG CCAAACAATA
168551 TTTCATTATG AGCATTACAC ATACATTCTT TATCCATTTC TCAGTTCATG
168601 CACATTGGG TTGTTTCAC TTTTGACTA TTATGAATAA TGCTGCTATA
168651 AAATATTAGT GTACAAGATT TTCACCTTAA TATATACCTA GGCAATGAAAT
168701 TACTGGGTTA TATGATAACT CTATGTTAA CATTGGAGG AACTCCAAA
168751 TTATTTCCA AAGTGGCTGC ATCACCCATC AAATTTAAAT CAATAACAA
168801 TTTTCCATG TGACAGTTG AATGATGGCA AGTGTCTTT AATGATAACT
168851 ATTTCTACAG TTATATTATCC TTGTTCTGCT TTGCAATTTC CCATGTTCC
168901 ATTAAGAAAGT GGGTTCTAGC TTTTATCTA TAACGAATTTC TCAGGTTTA
168951 ACTTACTTAA CTGAACATAT AACTGGCTTC AGTTTAACC ATGTTTTT
169001 GTGTTGATTA TCTCTATGAG CAATGTAAT TGAAACAAAGG ATTAATTT
169051 GTTACTCATT TCTGGAGTAA AGTCTGTTAG TAGAAATAAG GCACAGGGTG
169101 CATGAATCTA AAAATGTGAC CAAAGCATCC TGCCCTAATCC ATAAATTCTG
169151 TCCCTCTTC TGACCTGGTA TCCAGCCCTA GATAGATCCC TGCCCTTACTC
169201 TTCTTCCCC TTCTCTCAACT AACTGTTCTT GGCAATTTC CGGAGTGAGG
169251 ACTTGAAATA AGAAGGGCTT AGAGAAGTAG GTTAATTAGG GCCCAGCTGT
169301 TAATGGCTAA ATATATTAC TTTCTCAGAG GTATTTGCAT TTAAATGAG
169351 GGTGGCTCTC CAGACACTTT TGGGGAACGA AGAGTCTCAG CCTCCAAAGA
169401 CCATTGCAA AAATGGAATT TTTGACTTCG GAGTGAGGAA AGCCCTTAAC
169451 ATCCCTGAC TCCCAGATCC TTAGTGCTAG AGCGGACTTA GGAAGTCAAC
169501 TCCACTAAA CCTCACTTGT TTATAGGGAA ACAACCAGCA AAGGGGTGTG
169551 ACTTGCCCAA GGTACACAG TGAGGCAGCA CTAGAGCTAG GCCTGTCACC
169601 AAGGGTAGCA GGCAGTATTG AGGCCTTTTC TATAACTCCA GGTCACTCT
169651 CAGTGAACAT TTGAGGCAC CCTGCTGCTT AAGAATACAC AGAACAAATAC
169701 ATAGAACAAAG AATACACAGA ACAAGGGTGG GGATAGGCAT ATTACCTCT
169751 CTGGGGTGTAG ATAGAAATTG CATGCCAGTG GCCTTAGAGA CACTGAAAGA
169801 CCCCAGGTAA TTACATTGCC AGCCTCCATC TTGTTGCCAG TAACCCCTCA
169851 GTCAAGCAT CACCAAGTCA GCCTCTTGGG TTGTTGTATC CTTCTGATCT
169901 GCATTTTCT TCTTCTGACT TAATGACCTC TCAAATGCTT ACAACTGCCA
169951 GCTAATAGGA TGAAAATTGC ATATACCATC CAAATAAAA AGACTTGAT
170001 GTTTCGATAG ATTAGTGTATTAATTAGGCTT CAAATTACTA ATTAATTCTAG
170051 TTTGAACAT AGTCCAGTA TGTGGTGTGT TTCTTCTCCC CTTCAGAGGA
170101 ATAATGCAAT TCATAAGACG ATAATTTTTA GAATTCTGC CACATAATTA
170151 GCCTACTGCT GCATAGAACT GACCCACTCC TTGGAATGT TTGTGATTAG
170201 GGTGTAAATA TAGAGTTAGA GACCAAGGAA GGCTTTGAAA GATTTAACAA
170251 AAGGAGGGAG CTACACTTT ATTTCACAGT TCTTTCTGTC CCTGTCGGAA
170301 TGCATGAGCT TCAAAGTAGC CAGCAGCATT CTTTTAGCAG ATCAACTTCGG
170351 AGGAATGCTT CTGGGGTTCA AATAGCCACC TTGGAAGGGC TGCCGGAAGA

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170401 GAGGAGGGGA GGAGATTGTA GGTTAGAGAA GACAACCTTAT AGGCAAGGAG
170451 TCAAAACAAA ACAAAACAAA ACAAAAACAA ACAAAACAAA AAAAAAAAAC
170501 CTTGTTTTT GTCCAGATGC CCCTTTAGC TGGCTCTGTA TTCTTGGACA
170551 ACTCTCCAAT CCTCAGTTTC CTCATCTGTC AATTGAGAAC AATAATTCC
170601 ACTCTACCTA CTCATAGTGT CACTGGGGAG ACCAAATATG TTGCCAAATG
170651 CACCATGCTT TAAAAAGTTA AAAGTGTCT GCACAAATGG AAAATTCTTA
170701 CTTCACATAT TAAATCCGCC CATCTGTACA TATTACACATA TGCTGTAT
170751 GTACATATGC ATATATATGC TTGCATATAT ATCCATATTT TATAGGAGAG
170801 ATATGTATGT TTATTTCCAT AGCATTGGTG TGGGCATAAG ATGAACCTGA
170851 ACCATGCAGA AATTGGAAAG CTATGCCACT ATCTCTCACA GATGTGCCTG
170901 GGTCTGGAA CACACAAGTG CTGAGCCTGG CTGCCAGTGG TCCTCCAAAC
170951 CCTAACACTG ACTGTGCCATT CACTCCCTGC TCTGAGACTG TGGGGAGTGC
171001 AGACATCTGG CAGCCAGAGT CCTTCAGAGT TGTAGTTCTT ATCTTTGTCA
171051 CTCACCAGAA GCAAATCTTA GACCAAAATGA GTGTTCTCA AAACAGAGGA
171101 CCTGTGGAC TCTGTAGTGT TTCTGTAGAG CCAGTTGGAA AAATGTGGCA
171151 CCAACAAGCG AATGCTTCAG TGCCACTGCA ATTGCCAATA TGAGTACCTA
171201 AACCATGGAG TAAATGGTCA GATTGTTATA CTGGTATTTA GAATTTACT
171251 GGAATGAAAG CACATATTTT AAAATTCTCA TAGAGAACTA GAAGATTGGG
171301 AGAATTACA CAGGGTTCAG CAGACTCCTG TCTGAAAAAT ATTGAATTG
171351 TTGGACAACA TTGACCAAGT TGAAACAATAT GTGCTCTTCT AGAGGAGTAA
171401 TAACAATAGT AATATACAACA ATCTCTCTCA TTTTATACCA ATTATATAGT
171451 TTATGTGATA TTTCTGTATG AATCATACTA CCGGGTTTTG GATGTCTAA
171501 TACTCTATG AAGTAAACAA GGTGGAATTG ATCATCCCCA TTTTACAGAT
171551 GTGGGAACCTG AGGCTGAGAC ATTACATGAC TGAGCTGCAG AGGAGAAAGA
171601 CAGGAACCTA ATTAATGGAG TTTGGCTGTC AGGAATATGA CAAAAACCAA
171651 GAGATGTGGG CATAAGAATA AGATGATCAG CCTAACCTGA TGCTGAGACA
171701 CTTGACTCAC TGAATTAGAA TTCCCTAAAC CCCTAATAAA TTACAACAAAT
171751 AATAACAATG GCAATAACCT CCACAATTGA CTGATTGCTA CATTCTAGAC
171801 ACTATGATAA ACACCTAAAT GCATGTCAAT TAAACCTTCC CAATAGCC
171851 TGAGGTTGAT ATTATCCTCA GATGAAGAAA CAGAGCTTC GAAAGGTTGA
171901 CTTTTCCACA GTCACAAAC ATATAAAGTG ATGGAGCTGC ACTTCTCCTC
171951 AAGGGCCATG GAATCCAAA ATTTGTGTT TTATTACCGT GCCATGTGAG
172001 TGCTGGGAG GGAGAGTTGG GGAAAGAGTC AGGAAAGAGA GGGGGTTGTC
172051 CTGGACAAGA CAGCTTGTAGT TAAATCTTG TCTACAGTAG CAGCAATAGA
172101 TCTGACATTC CAAACAGGC TCTCAAAATT CCATTGGACA TCTGTCTCAC
172151 CATTACTCC ATGGTTTGG TACTCATATT GGCAATCGCA GTGGCACTGA
172201 AGCATTCACT TGTTAGTGCC GCATTTCAGA AACTGGCTCT ACAGACACAC
172251 CACAGAGGTC CACAGGCCT CTGTTTGAG AACACTCAT TTGGTCTAAG
172301 ATTTGTTCTT GGTGAGTCAC AAAGGTAAGA ACTACAACTA CATTGATGGA
172351 ATTTTATTAA AATTATTATT TCTAGTGTGA CAGAAGCTGA GGAAGAGATG
172401 ACGGAGTTAG CCCATTCCAG GTCTTATCGG GTACTTTGGG AACCAAGGACA
172451 GTTGGCCATT TCTGCCATGT GCTGCAGAT TAACTCTGT AGAATGTTAG
172501 ATTGGAAAGT TTAGTCTATT TGGCAGCTAT TCCAAGCCCC CAGCCCCATG
172551 CTGCTGCTCC TCTGCGGGAT CAGGCCCTGAG CAGAAACTGT TCTTTAGTCT
172601 CCTTGCTCCC CTGTGGTGTAAATCTGTCA GCTCCTTCTG CAAAGCTGAG
172651 CTCATCCACT TTCTTCAGTG CCTCTCTTCC TGTTGGCTCC GTACCTCACA
172701 GTTATGTTTA GTTTCTGCAG CTTCTGGTTA GGCAGGTGGT ATAGTAGTTG
172751 GGAAGGGTGG CTTTGAGGCC AGTTCTGGGT TTGAATTCTG ACTTTTATAC
172801 TTATTAGCTA TGTAACATTA GTCAATTAT CTACCTTTTC TGAGTTTTG
172851 TTGCTTATC TTTAAAAAAG AGAATGATAT TATGTACATT CTTATAGGGT
172901 TTATGAGAA CTAAGTGAGA TCCCTCAACG CTCTCGGAAA TGAAATCACA
172951 TCTACCTGTT TTATGCTGCC ATAGCCCCAG ATATTTTTC ACTTACTATA
173001 CTTGAGATTA GATAACTGAT TCTCTATTAT TTCATGTCTT CTTCCCTGTT
173051 TATCTACAAAG CTCCTAGAGG AAGGATTGTG TGTGACTTAT TCTCTGTTGA
173101 ATTCCCCAGGG CCTGGCGAAG TGAGTTGCAC ATAACAGGTG TGCTTTAAAA
173151 AGTCAATGAA TGAATGAGT AATGAATGAA TAAATGAATT CCTAGAAAAT
173201 AATGTCTGCA CCTACATATC AAATGTACTT AAAGGCAAAA TCTTTTAGCA
173251 CCTATGCTAG AAGAAGTAGA GGTAGTAGGA ATATGAATT AGTTATGAAT
173301 ATGCAAATAA GTAGTTAAAG ACAGGCCCTAA GAGGCCCTCT AACCCACTTC
173351 ATGTAGAGAG CCAGAACTTC CTCTACAAACG TCCCCAACAG AAACCTCAGCC
173401 ATCAGGTCTCA TGCTTGAAATAACCCAGTG ATGGAAAAGT CCTACCTCTG
173451 AGACAGCCCC TTTCTCTC AAAGGCTCA GACAGTTCTC GCACCTCTCC
173501 TGGAACAGGG CACGCCCTGT GTGCTGCTCA CCTCTGTGTC CTCTCTCATC
173551 ACTTCTGACT CTAATGCCCT CTGGCTCTTG CAAAACCTAC CTGTGCCTTC
173601 CCACAAAGCA GCCTTGTAGT ATTGAAAAT GGCTACCTTG CTTACTCTT
173651 GGTGTTGCA CCTTCAGTCT GGACACACCC CTGTTCCCCC AGTGCCTTCT
173701 CTCAGGATGT GGTTCTTACA GCTGTCAGA CAACCCACAA ACATGGACCA
173751 GGCCTGTCGG TATGCTGAT ACTGCACTGG GCTCATGCAA GAAGGACTAA
173801 GAAGCATGAG GCTGAACATT GTCCCGAGG CAACCTGACC TTTTCTTCCA
173851 GCTAGATTAG AACATGAAA ATAACATTCT CAAAAGAATG CCAGAGAAA
173901 ATCACAGCCT GTGAAAATAT CTAAGCCTCA TAGATGGCCA CCTACCCCTGT

173951 CACAGTGTGG TGATCAGAGG CCAGGGAGGC CGCCTCAGCT GTGGGGTGTG
 174001 TGGGAAGGCT CGTGAGGCTG CATCTACAAG GCCAGCAGTC ATGTAGAGTG
 174051 TGCCCTCCCC CTTGTTGAA GAATCCAGCG GAGTGAGAGC TGAAGGGTAC
 174101 CTATGAAACT CATCTCACCC GGCGCCTCAT TTTATAAAAT AGACACTCAA
 174151 GAATGAGAGA AAGGAGGTGA TCTGCTGAA TTCAACCCAGA AGTTAAACAG
 174201 CAAAGCTGGG CTAGGATTGAG GAGTATTACAC TTGCTCCTTC TTTGTGGCTT
 174251 CTTTTCTCCA AACTGCCTT TCACAAATGTG CCCATATGCC TCTGTGTTGA
 174301 GGGTGGGGCA GGAGCAGAGA CAGAGACAGA GACAGAGAGG GAGCTCAGAA
 174351 GTGCTTCTTA CTCCCCACTG TGCCCCCTCTC AAGGACTCTC TTTGCTGATG
 174401 AAGCTTATTC CAGTTTCTCTC TTCTTCCCTCC CACACAGCCT TCCCTCTCCC
 174451 GCTCTGCTCT CACCTCACTG TTCGGTAACA GACACTGTGT GATCTCCAGA
 174501 GCTGACACTG CCCAGAGCCT TTGGAAGGAA AAGGAGAGTG GGTGGATAGA
 174551 AAGACAAACC CCAGATGCCA AAGGATGCTG TCTTCCAAGG TGATCCAAGC
 174601 ATCCCAGTCT AGGTTACTCT TTGTTATTACAC CCCCCTCCTC TGAGAGAATT
 174651 CACCCAGAG ACCTCTGAGA TTTTCTGCCT CCCCTCCAAGA AAAGTAAGAT
 174701 TCTGGTCCA TTTTATAAAGG AGAAAAATGA AGTTCAAGTT GTTGAACAAAC
 174751 CTTTTGTAAA GTCAATTGAC TAAAAGTGGAA ATTCAAAACCTT AAAACCTTTC
 174801 CCATTCTAAG GATTAGGCTT GTTCTCCATT GGGCCACACT GCCCAAACGT
 174851 GGGAAACCTT TGCAATTCTT AGGACTGGTA TTATAATTGA GCAAAGCCAA
 174901 GAAATAAACT CCTTTCTTCC TTAAACTGCC TGTTTTGAA ATCTGGCTCA
 174951 GCTACTTACT AGCTGTTGTG CCATTGCAAG TCACCTCTCC TCTTTGTAC
 175001 TCAGCTGTCT CACCTATGAG TGGGAATATT AATGTGGATC TCATAAGATA
 175051 AAGATAAAAT GAGTTAATGT ATGTTAAAGTT TTAGAACACA GAGTGAACAA
 175101 GAAGCCCAGG GTCTCATCCT AACTCTGTCA CTTACTCATG ACCATTTATG
 175151 CAAATCATAT TTTTCTGTAA GATCTCAATT TGTCTAGAA TTGGCATAAT
 175201 GTTTCAAAA GGAAAAAAAT CAGCAAAACA ATCTTCCCTGC CTGTGTGATT
 175251 TAGGGTTCTA GTTTTCTCTGA TTGCTCTTCAG TTCAGAGGTA TCAAAACATA
 175301 TCTCTCATAG CCACACTGGC TCCCTTAAGC TTAAGGAAGA GGCTGTTCTA
 175351 TTAATCTCAA GCACTGGGTG TGTGTATCTT TCGATCTTGC AAACCATGCA
 175401 CACCTAGGCT GATTGGAAAT GGCCCTTTTC ATGCTGGTC AGCATCCTT
 175451 GGACCATTC AGATATGTA GACAGTGAAT ATGATTGCTC TGACAGAGCA
 175501 TGGAAACTCA CTGTCAACCAG CAGCCTCAA GCAAGAGGGG CCCCTTAGCA
 175551 CTAATTTGG CAGATGGTTG GTGAGCTATG TAACTAGAAG AGTCTGGTCC
 175601 TTGTTTCCCT ACCTATCCCT CTTTTTAAGA CAGAAAAATA GAGAATACAA
 175651 TGGGAGGGAA ATGGAGCTCAG AGGAGACACA GGATTGTTAGG TAAATACTTA
 175701 CTATGTGCCA AGCACTGTT CTTAAGAACAT TGACAGGTAAT CATAGTTAAT
 175751 CCTCACAACAA GCTATGGAA ATACCAATAAT AACCTTATG TTGCAGCAAA
 175801 GGTTACTGAG GCACTAAAAG GTTGAGTAGC CCTCTGAGG TTGCACAGCT
 175851 AGGAGGTGGT GGAGCTAAGA TTTGAATCTA GGCTGACATG CACAGGAGT
 175901 TTCTGTGACA GAGGGCAGTA ACCCTCTGTG GCTCTGACTC TGAACCTCAA
 175951 TACATGCCATA TTTTCTGCTT GTGTTCCCA GCCCCTCTCA CCCAACCAAA
 176001 GGCACCTTTT TTTTTCTCAGG CTTCATGCTT TTGCTGCAAG ACCTTCCCTG
 176051 AGCTCCAAGA TCAAGTTGG GTCCACTCAT TTGCTCTAT AATTACTTGT
 176101 GTAATATTGG CCTTTCTCAC TAGACCTTAG GTAACTTGAA AGCAAGGACC
 176151 ACACCTGCTC TCTTCTCTGC TACATTCTA TGTTAGCAT GGGCCTGACA
 176201 GTGTTAACCA CTCATGAGTG AATGAGTAAA TGGACAAATA AATGATTAC
 176251 TACAATATTCTT CTTACCTGGT TCCCAGTAGC TTTCATATT ATCATGTTG
 176301 GACTTTCTT CTTCTTTTA TCAAACATTC AATGGGCACC TACTATATGG
 176351 GAGGCTGTG AAGCTGTAA CCGGCTTTTC ATCAAAGAGAT GGGCATGCTA
 176401 TGAGTATTG CTTGGCTTT TCTGAGATAGG AAGGTTTGTG TCATGTAAG
 176451 GGTAGATGCA ATTGTTTTA AGTCCACTGG GAACTGTAGC CATAAGGGCC
 176501 CACCTCATAC CAGGAAATTG GCTCTGCTC TGAATGGCC TTGGCCAGGT
 176551 GTCATTCTG ACCACAAACAG TTGGGGCAGA GTAAAGATGA AGGGACTCTC
 176601 TGGAAAGACCA ACTATTCCA GGCCAGGTAG TACACCCATG CAGCCTTGCA
 176651 CTCAATAGCC CAACCTGGAG TCCCTGACCT TCTGCCAGAA AGTGCCAGCA
 176701 TTTTATCTA AATCCCCAGGG CTGAGAGAAA TTAGTTGTG AGACCCCTGAC
 176751 TGACATTAC AATGCTTGT CAATACTGGA TACTTGTATG AGGTATGTCT
 176801 GTTGGTTGTG TTGAGATAT CCAAGTGTGC CTCCCTGGTT CCAAATGTAA
 176851 CTGGATAAGT CAACACGAAT GCTTTTTCT TCTCAATATT TATGGTGT
 176901 TCACTGATTT AAGCACAGCT ACAATACCTT GTTAAATTAG AGGAAACCAAG
 176951 ACTACCCCTCT GTGTTACCAG AGATTATATA GGGAGAGGAC ACCTTAAAGG
 177001 TTTGGTTGGT TAAAGTGGCT AAAATAGGAA AATGTGAAGA CTTTTATGCC
 177051 GAGACATGGG TATTTGAGGA CACAAATTAAG TCTTCAGGCC AGGAGTATTG
 177101 CACAAATTCA CACATATCCA TATTCTATGCC CACATACCTG TGTGATCATA
 177151 GAATTCTAGA TCAAAGCTGG AAGAGCCCTT AAGAGAGAAA TCAAGTGGCT
 177201 CAGAAGTTTC CAAACTTTT AGTTTGAGGC TCTATTTCAT AATGGAATCT
 177251 TGGGGGAGAA CTCTCATATA TAAAACAGAT AAAAAGCAGA GCTACTATGG
 177301 TGGAAAAGAG AGGGTGGGAT TTAGGACCAC ATCTTCTGC CTTTTCCCTA
 177351 ACCTAAATAG GTAACTCTA AAATGCCTGC AACCAAGGAAC ATAGCTTATA
 177401 AGATCATTGA TGTAGCCAAA GTTCTTATTG TGCAGATCAA TCAACTAATG
 177451 GCTATACAGG TTGAGATAAT TGCCCAAGGA CAAACAACTC ATGAGATTCA

177501 AAGACAGGAT TTATGGGTT CTCCCTAAAA CTCTTTCCT GACACTTCTT
177551 ATTTATGACC TGGTCACAA TAGACTACAC AAAAAGTCA ATAAGAAGAC
177601 CTCTTGTAC CACAAGACAA AAGCTGAGGC TGAGTGGTGA CAGGATTGAA
177651 GCTTATAAAA AAATCATGAG AGGGTGAGAA GAAACTTTCT GTTCCTTCAT
177701 TCCTCCACAT GTATTGAGCA TGACCCCTGA TCCAGGTAAGT GCTTGTCGAC
177751 GCTGTGGGG CCAACGTCCC TGCCCTCCAG GAGCTCACAG TCTCACAGGG
177801 AAGATGAGAA GGGCCCCCTGC ACGTCAAAG AAAAGCTAG GAGAGGCCA
177851 GAGAGATAG AATAAAAGTGC TGTGTGGTTC ACATTTCAAG TACAGCACA
177901 CATTAAAGGA GCTAAGGGAA ATGCCCTGAT CTACATGGAAG CCTGATACTT
177951 CCTTCTTGGT ATAAAAATGT GTGCTGCTCT GAGTGCTTCA TTGCAGGACA
178001 GGACATAAAAT GAATAGATTG GCCTCACTAG TGTTGGGAG GCTTGATGTA
178051 CAGTGGTTAG AAAACAAGTC CTAGAGTCTT TTACTTGTGTT GGTCTCTGTC
178101 CCTCACTAGC TATACTGTAC TGAGCAGGAG CTACTCCATT AACCTAACCC
178151 TCAATTTTT AAATTTCTAA TTTGCTAATG GGAATGATAA TAGTACCCAC
178201 TTTACAGGAT TGCTATGAGG ATAAATGAG ATAACACAAA TAAAGTACTT
178251 AGCACAGTT CTACACACA GTACAGGTTT GATACGTGTT AGGTACTTGT
178301 AATTATTGTT TAGCCTAAAG TCTGCCCTCT ATGACATTG CCCTTTCATT
178351 GGCTCTGGCC TGCGTCCAG AGCCTCAGAG AACAAATCAT CCATCTCTC
178401 CCCATGACAA CCCTCTGGG ACTCAAATAC ATCCCTTCACT TACTTTCTTG
178451 GTCTTCTATA CTTTTTAGG CTGATAATTG CCACTTTAA AAAAATACTT
178501 CTAATATAAG ATTTTCAAA CCACAGTTT CTATAACTAC TCTCTCAATG
178551 GAGCTGTCACT CTAAGATTT ATCTGACAAT TTGGGGAAAC TTGGCATGTT
178601 CAACCTGTGC CATTCAAGT ATACAGTACA AGTCTTTGA TTTTCTCTC
178651 AACTTACCTC CTGTGGATCT CAAGGGGATG GGATGGAGGA AGTGCTCTT
178701 CCAGTGTCCC AGGATTGTT TAATAAACCT TACTTGCCCCG TTGACCCATT
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207351 GCTGGTCACT TGCTGCCCTGG ATGCAATTCTAT TCTGTCCACA AACATTTCT
207401 GAGCTCTTC TCTGGGAAAAA GATCTCTAG ACTAAGACAG GAACTCTGGA
207451 ACAAGTATGT TTATTCAGT CTTGTCCATG AGAAACTCAT AGCACCATGG
207501 AGAGATGGGG ACAGACACAC AAACAGCTAG ACCCAGTGTGTT CTAATGGGAA
207551 CGTACACAAG GTACTCAGGG TTCTGTCTGG CATGCAGGGGG GCACGGCCCT
207601 GGAGTTGGTC TCCCTGGCTC ATATCCTGGC TCCACGGCTA CCCTGTGGCC
207651 TTGGGAAAGT TACTTCACTT TCCACGTCTC GCTTTCTGCA TACTTAAAT
207701 TGAAAGGATA ATTAACCTACC CACTCGCAG GTTTGTGAG GATGAAAGGA
207751 GTTAAACAT AAAAACCACT TAAAGGTC CCGAAATGC AAGCATTCA
207801 TAAATGATAA CTAATATGAT TTCAAGTCCA GAGCCCAATC CCTTCTTAGG
207851 AAGAACAGCA TAGTGGCTAA ATGACGCCCTC TGGAGAGAGA TTGTCAGGGT
207901 TCCAGGACAA GCTCAACCAC TTTGCAGCTA CTTCACCTCG GGCAAGTTAA
207951 CACACTCCCA CAGGGCAGAC GAAATGGCAT GAAAAGTGTGAAACACTTAG
208001 CCTCTGACAT AGCAAGAGCA TCATTAGTGC TGGCAATTAT TGTGTTAAT
208051 GGCTGCGAGA TTACAGGAA AACTATTCTC AACTGAAGGA ACTGGGAAAG
208101 ACATGAAGGT GAAGGTGACA TTTCAGCTGA CCATTTGGCA AATGCCTCAG
208151 TTTTGTCAG CTCATGCTGA GTTCTGGCTG TTGATAGACC TGTCATCCC
208201 AATGCAATAG CACTTCTAGN NNNNNNNNNNNNNNNNNNNNNNNNNNNNN
208251 NNN
208301 NNN
208351 NNN
208401 NNN
208451 NNN
208501 NNN
208551 NNN
208601 NNNNNNNNNNNNNNNNNNNNNNNCTACTG CCCTTTTGGG CTAACTCTAT
208651 CTTCCACCA GGACCCACAG AACTAAACCA TCTGGGCAGA TTCTGTCTT
208701 CATATCTGG CTCATATTCT CCCTAACCTG AAAGGTTTTG GTCCAGACCA
208751 TTCACTCTC ATGATCATAA GCCCTGATTC CTCTGTGTC ATTTCCTCCT
208801 GTGTAAGATC CCACACTTGG CTTTGCTTC TCTGAACCTCC TTAGGCCAC
208851 TCACTTGCA CTTCTGCGGC CATGTCTGTT CTTCCCATGG TAGACCAGAG
208901 GCGTTCTAG AGCAAGCCCT ATCTCTCAGA CTTCTTGCA TCTCGTCAAC
208951 CCTGCCTGAC AACAAAGCAAC ACTAATGTCTT TAGCTCAGAG CCTTGTCAC
209001 AATAGCACTT CAATTAATAT TTCTTGAAAG ACCTTGAAAATGAAATTAGT
209051 ATAAATAACC TACTCAATT TGAAAATTAT ATATTGTCAA CCATAATT
209101 TAGGCACCTC TATATATTCA ATATTGTAT AGTTTACT TGAGACAGA
209151 AGAAATTCTT AAAATAAAG GATAAAACAC CATCATAGGA AGTTAAATCT
209201 AGATGGAAAA ATACAGTTAA CCTAAAAATA AAGTAAAAGA ATGAAATGTT
209251 TAAATCATAT GATTCCAATC ATAGTTGAGA ATGAGTTCAC TGAAAGTGCAG
209301 GGTTAGTAGA CATGGGGAA AGAGGGTTT GACCTGTGA ACAACTGCAG
209351 GGAATTAAAT CCCATGGTCC TGGCTTGCA TGTACAAAAGC AGACTGGCTG
209401 TGTAACAGT TAAGCCCTA TCCCTCAGAG GTGGCAATT CCAAACTGAA

209451 CCAATTATTG TGGGGATTTT CCCTGGGAGC AAAATTGGGG GCACCTGAAA
209501 AGCACTGTGC TTCTTATTAT TTCTGTTTAC CAATATTTA GAGCTCGGTA
209551 TGTCGAATTC TTCATGAGCT CCTTAACCTGC CTGTCTCTGG TATTGACTGG
209601 GTGACCCAGA GCAGGCCAGT TCAGAGGAGG CTGGCCCACC TGACACCTCC
209651 ACTCTCTTCT CATTAACAGA TTGGTTACTG GAATGAAGAT GATAAGTTTG
209701 TCCCTGCAGC CACCGATGCC CAAGCTGGGG GCGATAATTC AAGTGTTCAG
209751 AACAGAACAT ACATCGTCAC AACATCCTA GTGAGTACTC AGTCCTTCAT
209801 CAAGGTTACT TGGGATCAA GCTAGGCCAG CACAAGGGTT TTCCACCAGG
209851 ACTGAAAGCT GGCCTTCTT CTTGCCAAAAA CTGTGTAATA GATAAAAGCA
209901 GCAAGTCGAA AAGGGAATGC CCTGAAAATG AGAGGCTCTG AGTTTCACT
209951 CTGTATCTT TAGTTTCACT GTCTCATCCT TTGTACCCCTT GGGTAACCTA
210001 CTTACTTTCT CTTGAGGCCAG CTTTCCCCATA TTAAAACAT AAGAATGACA
210051 CTAATTGTG CTGGTTTCA TCTGTCCTCC CTCAGTAGAA GCTATTTCA
210101 AAGAAAGTCC AATACATAAA GTAGCTGTAA GTGAAGATGC TGTAATTTC
210151 AGTGAETGAT CATGAGAAC CTGGAGCCTG TTAGGGTCT ATTTCTCCTT
210201 CAAGATGACC CCAGAGGTAT TTCCAAAAAA ATACAAAATA TCCTGGAAACA
210251 TAATTGAAA AGCTGTATGC CATATCTCAG TGATAAAACA TTCTTATTTT
210301 AACAAAGTTT GCTTCCTTAA CACAAGAAGC TTGTAATGGG GTAGGGAGTG
210351 AAGACATTAA GGAAGTGAAT TGAGGGCCTA GAGAGCCTTC CCCAGTGTTA
210401 ACCAACACATG ATATTATGCT ATGCCAAAGT CCTCCCTAAC CATGGGTGAA
210451 CCCATAACCC ACATTCTGCT ATCTCCCCAT TTCTCTTCCA GGAAGATCCT
210501 TATGTGATGC TCAAGAAGAA CGCCAATCAG TTGAGGGCA ATGACCGTTA
210551 CGAGGGCTAC TGTGAGTC TGCGGGCAGA GATTGCCAAG CACGTGGGCT
210601 ACTCTTACCG TCTGGAGATT GTCAGTGTATG GAAAATACGG AGCCCGAGAC
210651 CCTGACACGA AGGCCTGGAA TGGCATGGTG GGAGAGCTGG TCTATGGAGT
210701 AAGTTCACCG CAGGGTGGGA ATTAGAGGG CGGAGGCAGA GGGTTTGACA
210751 GGAAATCATT TGGTGGTTGG GTGGCCCTGC CCACAGATGT CTATGAAACCC
210801 CTGTAATTGA GTGTTGGTGC TGCTGAACAG ATGAGTCATC CAAAATCCAA
210851 TTCTTCAGA CACTCTTGT TCAGGTTACT GTGCCCAGGT CCCTCAATCC
210901 CACTCAAGAT CTTGTGACGT CAGTTGATTG TGCTCAAACA CAGGTGACAG
210951 CATAGCTCCA AGATCAATT TCTTGAGGCA GACTGCTGAG TTGTCTATAC
211001 AAAGTCACCT GTGGCTCTCT CAGTATCAGT TTCTCTCTG ATATTAAATG
211051 CATCTGGAGC CAACCTAACT TTCTAGTTAC TTGCTCTCTC AGTTTCATGC
211101 TCTCTCATGA AATTCTCAAT TCAGTCAAAT GCCCCTTAAT TACTCTGTT
211151 CCTAGAGTGC TCCCTCCAC TCTCACCCCC TAAGATACTA CTCCCTCAAA
211201 ACCTATATCA AATAATACCTT TTTCAGGGT GTGTTCTTT CTTTCTTCTC
211251 ATAATAGGTG TGAATGTC TTTTAATTGT TCTCGCCCTTC CCCTATAGAA
211301 TTAGTTGCT GGTTTTTTT AATGGTTTAC CCTGCCTTAT ATAACGGTTA
211351 CCTGTGTAAC AGGGTAGGA CTATTCTATC TTATAGTGC TCACCACACT
211401 TGAAATAACT CCATGCACAA TTGTATAAAA ATCTTCAATA AATTACAGCA
211451 GTTTTGAAAA GCTGCTGAAT GTCCACATT GTTTTAAGCA TTTGGGGAAAT
211501 TATTGAGAAG CAAAAGATT GATCTTTGC TTAATACCTT ATGAGGTAGA
211551 AAAGACCCA TCTTTAACAA TTTTATGGGG TAGAAAAGAC AATGTGAGAA
211601 AATAGTAAAAGGTTAGTAG AATAAGGAGT CTATATTGTA TGGCTCAGCT
211651 AAGGGCTAAC TAGTTTTGT CTAGCCCTCA GTGGGGATGT GAAACTTGA
211701 AAATGACCAT ATTTAACACAG ACCGAGAGGC CGGGCACAGT GGCTCACGCC
211751 TATAATCCA GCACCTGGG AGGCCGAGGC AGGTGGATCA CCTGAGGTCA
211801 GGAATTGAG ACTAGCCCTGG CCAACATGGT GAAACCCCAT CTCTACCAAA
211851 AATACAAAAA TTAGTCAC GCATGGCGG GCACCTGTAA TCCCAGCTCC
211901 TTGGGAGGCT GAGGCAGGAG AATCACTTGA ACCAAGGGAGA TAGAGGTTGC
211951 AGTGAGCCAA GACCATGCCA TCGCACTCCA GCCTGGGGAGA CAAGAGCGAA
212001 ACTCTGTCTC AAAAATGATA ATAAAAAAACA TATGAGAGAA AAGCAGGCCA
212051 GGAATTTTA AAGTATAAAC AATAGGATGG TGGTGGAAAT AAGTAAGGTG
212101 TGAGAGGAGA ATGAGAAAAC GCATGGTTT TTGTTGAGGAC TTGGGTTGAA
212151 GAGTAGTCAG GGATACATAT GAGTAAAAAA TAGCAAGAGG AAGAGTGTGG
212201 ATGATTCACT GGGCATTGGG AGATCACGAA GGTATTTGAG TAGAGAGACA
212251 ACAAAGGCA ATGGAAGAAG CCTCCAGCTG CCTTGTGCGAG GGAAGGGACC
212301 ACCACGGCT CACTCATAGA AACTAAAAACA CATCCCAAGC CCCAGGTCAA
212351 TGTTAAGTGC TCATAAGGAC AAGCAGCCAC TGAGGAAGAT GATAAACTT
212401 GTTTCATATC AGGGCAAGAG GAGCCATGAT GCCCTGAGA GACATACAAA
212451 GGGAAATTCAA AGAAGAAAAA GATGGAATAA AGGAAATCTT CCTCAGGGAG
212501 GTAGCTTTTG AGATGACATG TGAAGGTGGT TATTGAGTTG GGGAAATGGGA
212551 TGTGCTCTC TCCCTTCTA TTCCCTTAC CACCTCTCAG TTTGGGAAGC
212601 TCCATGGACA AAAGGTAGAG ACCTGGATAG TACATGCTGC ATCTGGAGGC
212651 TGGTTTCCAT GGGAACTCCC ATCAAGCTCT TAAGGTCTC CCCATGGCAA
212701 CTGCTGTGCA CTTTTCACCT TCTCTAGCAT TTATCTTCAC CTTCACCTCA
212751 TGTAATGTGG TTTGCTGGT TAAAAGCTG CAGTGTGGGC AGAACATGC
212801 CAGGATCATC CCCAGTAGGC AACACAGCTG GTGGTGAGTC ACTGGCACAG
212851 CAGGGCTCAG GGCAGCTGGA GTTACCTATG GGTGCCTCAG CAGCCAGGGC
212901 TGCCTCAGTA GCCTCCTCCT TATCAGGCCT ATTCCCTCTGC CCAGTAAAAA
212951 CTGTTCTGAC CAGGTGCGGT GGCTCATGCC TGTAATCCCA GCACTTTGGG

213001 AGGCTGAGGC GGGTGGATCA CGAGGTCAGG AGATCTAGAC CATCCTGGCT
 213051 AACACAGTGA AACCCTCATCT CTACTAAGAA TACAAAAAAT TAGCCGGCA
 213101 TGGTAGTGGG CGCTGTAGT CCTAGGAATT CGGGAGCTGA GTAGTTAAGG
 213151 CAGGAGAACATG GCGTGAACATG GGAGGCAGGAG CTTGCAATGA GCCAAGATGG
 213201 TGNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN
 213251 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN
 213301 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN
 213351 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN
 213401 NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN NNNNNNNNNNN
 213451 NNNNNNN
 (SEQ ID NO: 3)

FEATURES:

Start: 2189
 Exon: 2189-2270
 Intron: 2271-5227
 Exon: 5228-5365
 Intron: 5366-158436
 Exon: 158437-158676
 Intron: 158677-161828
 Exon: 161829-162013
 Intron: 162014-167314
 Exon: 167315-167368
 Intron: 167369-185990
 Exon: 185991-186152
 Intron: 186153-188485
 Exon: 188486-188653
 Intron: 188654-197717
 Exon: 197718-197822
 Intron: 197823-209669
 Exon: 209670-209780
 Intron: 209781-210491
 Exon: 210492-210803
 Stop: 210804

SNPs:

| DNA Position | Major | Minor | Domain | Protein Position | Major | Minor |
|--------------|-------|-------|----------------|------------------|-------|-------|
| 177 | T | C | Beyond ORF(5') | | | |
| 2555 | - | T A | Intron | | | |
| 2924 | C | A | Intron | | | |
| 3162 | C | T | Intron | | | |
| 3163 | G | T | Intron | | | |
| 4092 | - | A | Intron | | | |
| 4720 | C | T | Intron | | | |
| 6289 | G | A | Intron | | | |
| 6611 | T | C | Intron | | | |
| 7861 | G | A | Intron | | | |
| 8614 | G | T | Intron | | | |
| 9249 | T | G | Intron | | | |
| 10272 | C | G | Intron | | | |
| 10351 | G | T | Intron | | | |
| 10444 | G | A | Intron | | | |
| 10467 | G | A | Intron | | | |
| 10785 | C | T | Intron | | | |
| 10846 | C | T | Intron | | | |
| 10847 | A | G | Intron | | | |
| 13842 | G | A | Intron | | | |
| 14103 | A | G | Intron | | | |
| 14128 | T | C | Intron | | | |
| 15560 | A | G | Intron | | | |
| 15657 | - | A | Intron | | | |
| 15736 | A | C | Intron | | | |
| 15914 | C | T | Intron | | | |
| 16657 | A | - | Intron | | | |
| 16658 | A | - | Intron | | | |
| 17099 | T | G | Intron | | | |
| 18139 | T | A | Intron | | | |

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| | | | |
|-------|---|-----|--------|
| 19303 | C | T | Intron |
| 19501 | C | A | Intron |
| 22852 | G | A | Intron |
| 23210 | A | G | Intron |
| 24040 | G | A | Intron |
| 24536 | C | A | Intron |
| 25125 | - | A T | Intron |
| 25167 | C | T | Intron |
| 25623 | T | C | Intron |
| 27143 | C | T | Intron |
| 27211 | T | G | Intron |
| 27383 | G | A | Intron |
| 27553 | A | T | Intron |
| 29141 | C | G | Intron |
| 30549 | C | T | Intron |
| 30984 | C | T | Intron |
| 31266 | A | T | Intron |
| 31425 | T | C | Intron |
| 32198 | A | G | Intron |
| 33129 | T | C | Intron |
| 33292 | G | C | Intron |
| 34124 | C | T | Intron |
| 34668 | A | G | Intron |
| 34807 | A | T | Intron |
| 36025 | C | T | Intron |
| 36058 | C | G | Intron |
| 36061 | G | C | Intron |
| 36418 | C | T | Intron |
| 36743 | A | G | Intron |
| 36958 | T | C | Intron |
| 37577 | G | A | Intron |
| 38464 | C | T | Intron |
| 38472 | C | G | Intron |
| 38509 | T | G | Intron |
| 38573 | T | C | Intron |
| 38624 | G | A | Intron |
| 38802 | C | T | Intron |
| 38842 | G | A | Intron |
| 39029 | C | G | Intron |
| 39040 | A | G | Intron |
| 39179 | T | C | Intron |
| 39424 | A | G | Intron |
| 39459 | T | G | Intron |
| 39594 | C | T | Intron |
| 40279 | A | G | Intron |
| 40666 | G | C | Intron |
| 40723 | G | C | Intron |
| 41090 | C | T | Intron |
| 41260 | C | T | Intron |
| 41421 | A | G | Intron |
| 42640 | C | G | Intron |
| 42650 | C | G | Intron |
| 43285 | C | T | Intron |
| 44406 | A | G | Intron |
| 44585 | C | T | Intron |
| 44772 | A | G | Intron |
| 45507 | C | T | Intron |
| 46883 | C | T | Intron |
| 47855 | G | T | Intron |
| 47885 | C | G | Intron |
| 47941 | A | G | Intron |
| 48328 | T | A | Intron |
| 48391 | G | A | Intron |
| 48453 | A | G | Intron |
| 48690 | T | C | Intron |
| 49100 | T | C | Intron |
| 50598 | C | A | Intron |
| 50753 | G | A | Intron |
| 54798 | G | C | Intron |
| 55058 | A | G | Intron |
| 55171 | C | T | Intron |

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| | | | |
|-------|---|-----|--------|
| 55801 | G | A | Intron |
| 56324 | A | G | Intron |
| 56557 | G | A | Intron |
| 56716 | T | G | Intron |
| 58247 | C | T | Intron |
| 62318 | T | C | Intron |
| 62429 | C | A | Intron |
| 62449 | A | G | Intron |
| 62450 | T | A | Intron |
| 62554 | G | A | Intron |
| 63688 | T | C | Intron |
| 64921 | G | A | Intron |
| 64934 | T | C | Intron |
| 65150 | T | A | Intron |
| 65198 | A | G | Intron |
| 65674 | A | T | Intron |
| 65720 | C | G | Intron |
| 65820 | T | C | Intron |
| 65948 | T | C | Intron |
| 65978 | G | A | Intron |
| 65988 | C | T | Intron |
| 66089 | G | T | Intron |
| 66332 | C | T | Intron |
| 66361 | T | G | Intron |
| 67130 | G | A | Intron |
| 67148 | T | C | Intron |
| 67541 | G | T | Intron |
| 67608 | G | A | Intron |
| 67670 | T | C | Intron |
| 70638 | C | T | Intron |
| 70767 | T | C | Intron |
| 71275 | G | A | Intron |
| 71401 | C | A | Intron |
| 71656 | C | T | Intron |
| 71969 | C | T | Intron |
| 72194 | A | G | Intron |
| 72292 | A | G | Intron |
| 72351 | A | G | Intron |
| 72382 | A | C | Intron |
| 72424 | G | T | Intron |
| 72466 | G | A | Intron |
| 72829 | G | A | Intron |
| 72913 | G | - | Intron |
| 73395 | C | G | Intron |
| 73961 | T | C | Intron |
| 75749 | T | C | Intron |
| 77275 | C | T | Intron |
| 77282 | G | A | Intron |
| 81236 | T | C | Intron |
| 82536 | C | T | Intron |
| 82954 | A | C | Intron |
| 84157 | G | C | Intron |
| 85443 | T | G | Intron |
| 85674 | T | C | Intron |
| 85850 | G | A | Intron |
| 85905 | T | C | Intron |
| 86535 | - | G | Intron |
| 87371 | C | G | Intron |
| 87392 | G | A | Intron |
| 87423 | T | C | Intron |
| 87627 | T | C | Intron |
| 87637 | G | A | Intron |
| 87777 | A | G | Intron |
| 87810 | C | T | Intron |
| 89812 | G | A | Intron |
| 90137 | G | A | Intron |
| 90400 | G | A | Intron |
| 92359 | A | G | Intron |
| 92555 | - | T C | Intron |
| 92641 | G | C | Intron |
| 93969 | G | C | Intron |

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| | | | |
|--------|---|-----|--------|
| 96601 | A | G | Intron |
| 96865 | T | - | Intron |
| 98448 | A | G | Intron |
| 100137 | T | C | Intron |
| 100264 | A | G | Intron |
| 100873 | T | C | Intron |
| 102673 | C | T | Intron |
| 102807 | T | A | Intron |
| 102938 | A | G | Intron |
| 104061 | C | T | Intron |
| 107552 | - | A | Intron |
| 110789 | T | C | Intron |
| 110884 | T | C | Intron |
| 115075 | C | T | Intron |
| 115286 | C | T | Intron |
| 121154 | G | A | Intron |
| 121250 | T | G | Intron |
| 124478 | G | T | Intron |
| 124841 | C | T | Intron |
| 124842 | A | G | Intron |
| 128941 | G | A | Intron |
| 129471 | C | T | Intron |
| 130568 | T | C | Intron |
| 132179 | G | C | Intron |
| 132792 | C | G | Intron |
| 133502 | A | T | Intron |
| 133661 | A | G | Intron |
| 133768 | G | T | Intron |
| 133837 | A | C | Intron |
| 134003 | A | G | Intron |
| 134098 | C | - | Intron |
| 134530 | G | A | Intron |
| 134746 | T | C | Intron |
| 135854 | G | T | Intron |
| 136893 | G | A | Intron |
| 136945 | C | A | Intron |
| 137997 | - | T | Intron |
| 139348 | G | C | Intron |
| 139437 | A | - | Intron |
| 140321 | C | T | Intron |
| 140570 | G | A | Intron |
| 141441 | T | C | Intron |
| 141639 | C | A | Intron |
| 141796 | A | - | Intron |
| 141797 | - | C T | Intron |
| 141799 | T | - | Intron |
| 142186 | G | T | Intron |
| 142212 | G | A | Intron |
| 142600 | A | T | Intron |
| 142631 | T | C | Intron |
| 145397 | G | A | Intron |
| 145438 | C | T | Intron |
| 145855 | A | - G | Intron |
| 146816 | G | A | Intron |
| 147228 | G | C | Intron |
| 147968 | T | C | Intron |
| 149372 | G | A | Intron |
| 149466 | G | T | Intron |
| 149468 | G | A | Intron |
| 149474 | C | A | Intron |
| 151121 | G | A | Intron |
| 151984 | C | T | Intron |
| 152547 | A | C | Intron |
| 152560 | C | T | Intron |
| 154834 | T | C | Intron |
| 155118 | G | A | Intron |
| 156897 | C | T | Intron |
| 157808 | - | G T | Intron |
| 159171 | A | G | Intron |
| 159465 | G | A | Intron |
| 159505 | C | T | Intron |

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| | | | |
|--------|---|-----|--------|
| 159786 | C | T | Intron |
| 159787 | G | A | Intron |
| 160954 | - | T A | Intron |
| 160955 | - | A T | Intron |
| 160959 | G | T | Intron |
| 161415 | C | T | Intron |
| 161800 | - | T C | Intron |
| 161899 | T | C | Exon |
| 162793 | T | C | Intron |
| 162919 | C | A | Intron |
| 162939 | - | A G | Intron |
| 163647 | A | C | Intron |
| 163675 | G | A | Intron |
| 165562 | C | T | Intron |
| 166011 | T | C | Intron |
| 166623 | G | A | Intron |
| 167461 | G | A | Intron |
| 168935 | G | A | Intron |
| 169142 | T | G | Intron |
| 169379 | G | C | Intron |
| 171315 | G | T | Intron |
| 171400 | A | G | Intron |
| 172007 | G | A | Intron |
| 172220 | C | T | Intron |
| 172690 | T | C | Intron |
| 174992 | C | G | Intron |
| 176676 | G | A | Intron |
| 176723 | G | A | Intron |
| 176944 | A | G | Intron |
| 178739 | C | T | Intron |
| 179524 | G | C | Intron |
| 179726 | A | G | Intron |
| 179901 | G | T | Intron |
| 180348 | A | C | Intron |
| 180459 | A | G | Intron |
| 180786 | C | T | Intron |
| 181129 | A | G | Intron |
| 181918 | C | T | Intron |
| 181936 | - | T | Intron |
| 183558 | C | T | Intron |
| 184778 | C | T | Intron |
| 185666 | A | G | Intron |
| 185832 | A | - | Intron |
| 187287 | C | T | Intron |
| 187351 | T | - | Intron |
| 187706 | C | T | Intron |
| 188282 | A | G | Intron |
| 190074 | C | T | Intron |
| 193266 | A | G | Intron |
| 193763 | G | A | Intron |
| 193782 | C | T | Intron |
| 194094 | T | C | Intron |
| 194499 | G | A | Intron |
| 195249 | T | C | Intron |
| 197371 | A | G | Intron |
| 198021 | T | C | Intron |
| 198039 | T | A | Intron |
| 198143 | C | T | Intron |
| 198458 | C | T | Intron |
| 199076 | C | A | Intron |
| 199527 | A | G | Intron |
| 199584 | C | G | Intron |
| 200070 | T | G | Intron |
| 200429 | A | G | Intron |
| 200676 | A | G T | Intron |
| 202325 | T | C | Intron |
| 202550 | C | T | Intron |
| 202609 | G | C | Intron |
| 202714 | C | T | Intron |
| 202809 | A | G | Intron |
| 203159 | G | C | Intron |

177 I I

FIGURE 3, page 65 of 122

| | | | |
|--------|---|---|----------------|
| 203168 | G | A | Intron |
| 203704 | C | T | Intron |
| 204111 | G | A | Intron |
| 204132 | C | T | Intron |
| 204285 | T | A | Intron |
| 204334 | T | G | Intron |
| 205015 | G | T | Intron |
| 205155 | C | A | Intron |
| 205510 | T | A | Intron |
| 205712 | G | A | Intron |
| 206028 | G | A | Intron |
| 206073 | G | C | Intron |
| 206487 | - | A | Intron |
| 207036 | G | A | Intron |
| 209309 | G | C | Intron |
| 210867 | T | G | Beyond ORF(3') |
| 212386 | A | G | Beyond ORF(3') |

Context:

DNA
Position

| | |
|------|---|
| 177 | TTCAAAGTAGTAAGATAACAAAAGTAAAAATGGAGAAATTAAAAGATGGAATCATTAAAT CAGAGACTCTTAATGTTGGCAGAGACCTTAAAGTGTATCTTCCTGATTCTGTTCTCTCA TCTTCCTATGCTGATGCTTATTCTCCCTTAAAGGTTCTACCCAGTGCTTGCTG [T, C] TATTAGAGCCTAAGAGTTAACAGAGCTGGGGCCTGATGGTGGCATTTACTGTGTTAAATGC CCAATCTCTTCATTAGCAGTAAAACCTGGGGTGAAGTTTTAGACCTCTGTTCTTCAT CTATAAAATGGGCATGAGGCTACCTACACAGGTATTGTACAAATAATGATGCAAGGTGCA TTTCTTAGCATGGTACCTGGCACATTCAAATAGTGAATAAACATTAGCCTTAAAATTA TTTAGCTAATTAATAATATGTGAAAGTGCATAGGAATCACAAAGCATTGACCTC |
| 2555 | AACAATATCCAGATCGGTGAGTGAGGGGGCAGCCTGGGGAGGGACTTTCTGGGTCTGGCC AGGGATTTTTGGGGATAGGGGTGTGACCCCCTCCCCGTTACTGACTGTTTGCTTG GCTCCCTAAAGCTGCTGCGGTACAGAAGGGAGACTTGGCTTACAGCCAGAGGAGGG GGCTTCTCTGATCGGATGAGGGCAGAGGGGAAGTGTTCACACACGCACACATACCCTA CTCGCACTCCAGGAAGAGCATGAAATGGAGGAACCATCGCTTGGAGGAAAAAAA [-, T, A] TCAGGCTGGAAAGGGTGGTGGGTGTTAACGGAGTTAACCTATTGCTTGGTAGATGGTGC TTGATTCCATTAAATGTAAGTATGTATGGTGTGTTTACGTGTGATTATAT ATTACATATGCACATATATATGTAATTGAAGGAGGCAGTGCTTCTCTGCTGGGGACAG AAAAGAGACCCCTCGAGAAGAAGGAGTGAGGGGTCTGGGTATATTGCAAGCCACTGAAATA ATGCCAGAAGGCCCACTCCAAGCGGGTAGGCTCCCTCTCTGTTCTGGACTCCTCCA 2924 ATTTTTAATGTAAGTATGTATGGTGTGTTTACGTTGATTATATATTACATA TGCACATATATGTAATTGAAGGAGGCAGTGCTTCTGCTGGGGACAGAAAAGAGA CCCTCGAGAAGAAGGAGTGAGGGGTGCTGGGTATATTGCAAGCCACTGAAATAATGCCAGA AGGCCCACTCCAAGCGGGTAGGCTCCCTCTGTTCTGGACTCCTCCAGTGCCTT CTCTGCTGCTGCCATGCTGCCGTGGTCTCCACTCCCCGATCTGGAACTTCT [C, A] GCCTGCCTTTCTCGTCCCTGCCCTCTTCTAGATTTCTATCCACAGAGGT CTACCTTTACACACAAACACACACAGTACACATGCTCTTCTCTCTGTTGGCT CTCCATTATCTGTGTTACTGGGTCCATCTCTCAACTTGGAGGCAGGTTCAACATGCT GCATGCTTTTTGTCCTCCATTCTCTCTGTTACACTTCTCAAAGGCCCGC CACCCCTCTGATTCTGAGGGACTGACAGATAATTGCTACTCTGATAATCATGAGGG 3162 TTCTCTTGCTGCTGCCATGCTGCCGTGGTGGTCTCCACTCCCCGATCTGGAACTTC CTCGCCTGCCCTTCTCGTCTCTGCCCTCTCTTCTAGATTCTATCCACAGA GGTCTACCTTTACACACAAACACACACAGTACACATGCTCTTCTCTGTTG GCTCTCATTATCTGTGTTACTGGGTCCATCTCTCAACTTGGAGGCAGGTTCAACAT GCTGCATGCTTTTTGTCCTCCATTCTCTGTTACACTTCTCAAAGGCC [C, T] GCCACCCCTCCCTGTTATTCGAGGGGACTGACAGATAATTGCTACTCTGATAATCATGAG GGAAAGCAAACAAACAGAAGCAATAACACCAATCACAAGCATGTCAGTGCCTGG GGCTTCCCGTGTGACCAGCATGTCAGTGTGTCCTGGTGTGCTGGGAATGAAGCAAGCTGCTG GTTTGGAAAGCATCTCGTGGTTGGTTCTAGTCTCTCTCCCTGTTAGGGAGATAGCT CCACTAGGGAAAGTCGCATTGCTGGGAGTTGTGCTTTTGAGTGTGTTGAGG 3163 TCTCTTGCTGCTGCCATGCTGCCGTGGTGGTCTCCACTCCCCGATCTGGAACTTC |

TCGCCTGCCCTTCTCCGTTCTCCCTGCCCTCTTAGATTCTATCCACAGAG
 GTCTACCTTTACACACACACAAACACACACAGTACACATGCTCCTCTCCTGTGG
 CTCTCATTACCTGTTACTGGGCTCCATCCTCTCAACTTGGAGGCAGGTTCAACATG
 CTGCATGCTTTTGTTCCCCATTCCCTCTTAGTTGTTACACTCTCAAAGGCCCC
 [G, T]
 CCACCTCCCTGTATTCTGAGGGGACTGACAGATATTGCTACTCCTGATAATCATGAGG
 GAAAGCAAAACAGAACAGAACATCACAAAGCATGTCACAGGGCTTGGG
 GCTTCGCTGACCAGCATGTCAGTGTGTTGTGTCGGGAATGAAGCAAGCTGCTGTG
 TTTGAAGCATCTCGTTGGTTGGTTCTAGTCTCTCCCTGGTAGGGAGATAGCTC
 CACTAGGGAAAGTCGATGCTGGAGTTGTGCTCTTGAGTGTGTTGAGGG
 4092 GGGAGCATCATAATCAAGAATTTCGTTCTATTCTAAAATGGGAGCACTTGAC
 ATGTGAAATCACTGGCTTACATGTGGCATGTTACATTGCTTATATACTACCT
 ATCCTTGGCTTGGAGCTGTTGTCTAGTATATTGTGTTATAGTAAATGGTATAAA
 TGCGAGGATGTTCATGATGTGCTATGTTCTCATGATCTCTGCATATTAA
 ATTATTTAGCCCTAATTGGTGTTCACAGGAAAGCATTGCTACTGATAAAGCATTGCTACTGTTCAAAA
 [-, A]
 AAAAGAGATTGAAGCATTAAATTGTTAGAACAAAATGCTGAAATACACTGCCATCAGG
 TAGTACTTGATTCTATTGTGATCTGTAACAAAAGGCTGCAATCCATTATTGGGTC
 TTAAAAACAGACACCCACTCTAACAGAAGTTAGAAGTGCATTATGTTGGACTGTGATTA
 CTGTCAGATTGAGATAAACTCTATGTAACATCATTATAGTCAGTCAGTCTAGAAAATGG
 CTGATTAAATTACAGAAATGTAATTGATTACATGTTGACAGTAAACAAAGGTAAG
 4720 CATCCCCTCAGGCCACCTTTACTATACCTTTACTAGAACATGTTGATCCTCTTGA
 GATGCCCTAAGATCCCACATCTTGAAGCACAAGGTTCCACCATGCAAACACACAATGGCA
 ATCCCTATGTAACAAGTCATTCTAGGTAACCTGGGATCATGTGTTGAAAGAGTAAGC
 AAAACATTGTTGAGAAAAGCAAGAGTTTAGAGAAAATGAAATAAAACCTTAGGGG
 CAATGAAATGTTAAATTGATGTCAGGTCTGCTAGGCCAAAGACTAAAACGTCCATG
 [C, T]
 AAACACTTATAGTAGTGGAGAACCCACAGGGTCCCAGAGCTAGATTCTAACATCACCCTGC
 AGCACTGATTAGTACCTACTTCCCTAAGGCTCTGGTGGAGAGATGAGGCTGATGTAAG
 AAAAATTAGACATGACTAGAGGGTGAGGGGCTATGTGTTATATAAGAGAAATAG
 CAGCTCTAGGTGGTTGCACAAGGGAGGAAGAGAGAAATGGCACAGTCCTGTGTTT
 CTCTGACTTTAGCTGAGTTGAGGGTACACAATCAAATGTTGAGCAAAGTAATAGATAT
 6289 CATCTGAATTGAATGCAATTGAAATGTGGGCAACAAACACCCATTCTGAGTTTCTGGC
 AACCTAGGAATGAAAAGGCTGTGTCACATGATTGGCTTTCATGACAGATGAAAGC
 ATAATTAATCAGGAAACATTTCCCTCAGGGATTAAGCTCAAGTAAAATTAT
 GGCAGGGAAATGTGAGCTGAATTCAACAAGAACATTGAGACCCAACTGGATTGAATT
 GGCACGATAGTCTGGTGTGTCATTGACTGGTACTCTGCTGAGCTGTCCTGGT
 [G, A]
 GAAGTCATGGACCATATTCCCTTGTCTTCATAGTCCCAGGGTGGAGTTCTCAAT
 GATTGAATAGGCTATGTTGAAGTCTAAATGAGAAGTCAGAATTCTTCTATCCA
 AAGACCACTCTAAATAATGTTGTTACAAATTCAAGAACATAATTACAGGATTTC
 ATTATTCAGAACCTACTGTGCACTAGAACATGATAAAACTTATAGTCATTATAGT
 CACATTCAATTACATGTTAACAGCACTGACTACAGCCCCATGTAATGCACTAATTGCTTT
 6611 TTTGTTCTTCTCATAGTCCCAGGGTGGAGTTCTCAATGATTGAAATAGGCTATGCTT
 GAAGTCACAAATGAGAAGTCAGAACATTCTTCTATCCAAAGACCACTCTAAAATG
 TTGTTACAAATTCCAAGAACATATAATTAGCAGATTCTTATTGAGAACCTACTGTG
 CATCAGAACTATGAAATACTTTAGTCATTAGTCACATTACCATGTATTA
 AGCACTGACTACAGCCCCATGTAATGCACTAATTGCTTTATGTTAGCTCATTAATC
 [T, C]
 TCACAGGAGCTTGCAAGACTAGACATTATCTCCTTGTAGAGATGAGAACACTGAGG
 CTACACAGATTATAACTTGCCTAACGGTACTCAGGAAGCAGGAAATGGGGTTTGAGAC
 CTGAAGGTCATGTTCTGGTACTGTGACAGATACTGATTCTTATGGTACCCCTAAC
 AACTAGTGGGATTACCAAGAACAGGGAAATTTCAGGGTCTGTAAGGCAGAGGTC
 TAATAAGTACCTAACAGGAAACACTACAGTGTAAACTGTAAGTATGATTGCA
 7861 AGGCCTGGAGTGGATGAATCTGAGTTCTGAACTGATGCTGCCATCCATGAACTAGTGT
 ACAGGTTTCCATGAATTCTGCTTGTGTCAGTTAATTCTTAAAGTGTGTTCTCAA
 GCTATAAACTGAAATGAGATATTGGAAATACAGAGATGATAAAATGCCCTGCTCTCAGGT
 AGCTACAGTCTAGTGGAAACATTGTTATGGGATTATCTGAGAACGAAATCTTATT
 TTGTCCTAGACTTTGTTCTTCTAGCTCCAGATCCCAAAGGGGACTGGGC
 [G, A]
 AGTTAGGTGGAAATGGTGGCCTGGCTGGAGGAGCCTCTCTAAATTCTGTAAGGCTAG
 GAATACTTTAGGGCTGTGTCAGTGTGGCCATTGGTTGGAAAACCTTACATCTGTC
 CAATTAAATTGAGTAAAAAGTCAGTGGGAGCAAAGCAGTTTAGGAAGAATGTACTC
 ATTACTGATAACATGGAAAGCAAGAACAGCATCTTACAGACTAATTCTGCTGTG
 TTTTGAAATCTGAATTAGTAGTTGCTTAAATTACAGCCCCAATAAGCTTAGATCTA

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|-------|---|
| 8614 | TAGCAGCAGGGACTAAAAATGAGGAGAGGTGGTTATATGGTAGGGAAGGTGGGGAAAGAT AGAAGAGGACTATGGCTACTACTGGCCAAGGTGAGAGTTGGTGCCTCTCGTGT CAATCTTCTGCTCCCTGGCTGCCATTGTTAAAGAGTAAAGCCATTGAATCAGCAAC CCAATGCCCTGGGATCTCCTTAAGCACTTTCAAGCTTACAGGGTAGAGTTGGGA GATTGTGCATAGAGAAGATATTACTGATCAGCTACCCAGCTTATTTGGTGCCTTG [G, T] TAAGTGTAAATAAGGAATAAATGAAATGCTGATTGAGATTATTACTATTAGAGGTCTGA GTAGCATAGTTCAGCTTAATTCTTACCTTAAATTATTACCTATTATTCAATT CATTCAAGCAAGTATATACTGAATGCCTACTTCATGCCAACACTGGGCCAGACGCTAGGA ATATAGGGGCCAGGAAAGAAGGCACAGCCTCTTCTGTGGAGCTAACAGTTAGCCC GAGGTCACAAACTCAGTGCACCTAAATTCACTCAGGGAGCTTGTAAAGCAAGACT |
| 9249 | TCAAGAGTAGGCCCTGGAGGAATTCTATAGCAATTATTATGGGATTACCTTAAGAAT CTCTTAAATCTAAAAGTCTTCCATCCCTTAGTAAGCATTGGAGCCCTCAACCAAAC CTAGGCATGACATAAAGTGTACAAATGCAGACAACAGTAAGTTGCATTCCCCACCTGG AGTACTTTATCCATAGTAAGCATTCTATCTGTAAAGAGAAAATTAAATGTAATGT TGTAAAGTGTCTATAGCAGCAATTGTATGGAGTATTGAAGATTCTTGAAGAGTGGAGTT [T, G] TCTCTAGGAGGTGGTGAATTGAGCCTCAACGATAAATAGGGTTATCTATCTGCAGA AGGGTCACCAAATATAGGCATCACAAGCCAGTCCAGCACAGAGACTGGAGTCTGGC CCATACACTGTGAGAAGCATGGAAATTTCACATTAGAACTTGGACATCTGTCTTGACT AATATTAAATATAAAATCTGGCAACACTAGGGCCAGGTCTATGCAGCCTCAAT TTGCTGAGATGGGACAGAGTAAACCCATCTACATGGCCTCTTCCCAATCAGCCCATT |
| 10272 | TTTCTGACCTACAATGCTTTCATATTGGCATAAAAATCCAGATTCTGGCATCT TTAAAAAAAAAACTAGGGCATTAAGCAACCCATTGGCCACATTCTGCTTAACCTCTAT TTCTAGAGCTGAGAAGTGTGCTCCCTTTAAATACATAACTCCAAAGTTAACAAAGT TTCCATTACTCCTGTTGATTGCTAGTAATCAAATTATGTTGTTGGCAGGGCTGT AAGTAGGCCAATCTACTCATACCTGATTATATCGTCAGCATTCACTATTATT [C, G] TTCTAATAATATCTATTACTTACCCGTCAAAAAATAATAAAAGACACAAAAGATGTATAA CTCCTACTCTCAAAAAAGTAGTGTGTTACAGTAATGAAGAGAATGGTGGCTGATGGT GGATAAACAGAAATTATTTGAAGACCTACTATGTGCCAATACTTTGCAAGGTGTTGCT TAAGTTTATAACTGTCTGAAAGGTGATTATCCCATTCATTGATGATGGTACTGAGA CTGAGAGAGATTGTGCTTCTTATATTATGCAACAAATAAAAACCTAACGCTAGTATT TA |
| 10351 | CATTAAGCAACCCTAGGCCACATTCTGCTTAACCTCTATTCTAGAGCTGAGAAGTG CTGCCCTTTAAACATAAACTCCCAAGTTAACCAAAGTTCCATTACTCTGTTG ATTGCTAGAGTAATCAAATTATGTTGTTGGCAGGGCTGTAAAGTAGGCCAATCTACTCA TACCTGATTATATCGTCAGCATTCACTTTATTATTTGTTCTAATAATATCTATT CTTACCTGTCAAAAATAATAAAAGACACAAAAGATGTATAACTCCTACTCTCAAAAAAA [G, T] TAGTGTATACAGTAATGAAGAGAATGGTGGCTGATGGTGGATAAACAGAAATTATT TGAAGACCTACTATGTGCCAATACTTTGCAAGGTGTTGCTTAAGTTTATAACTGTCT GAAAGGTGATTATCCCCATTTCATTGATGATGGTACTGAGACTGAGAGAGATTGTGCTT CTTTATTATGCAACAAATAAAAACCTAACGCTAGTATTAAAGCCAGTTGGGGGGCTC CAAACACTAACATGAGCATTCTCCTTAAAGATCTATGAATATGCCAGGGCAGTGGCTC |
| 10444 | ACCAAAAGTTCCATTACTCCTGTTGATTGCTAGAGTAATCAAATTATGTTGTTGGC AGGCCCTGTAAGTAGGCCAATCTACTCATACCTGATTATATCGTCAGCATTCACTATT ATTATTGTTCTAATAATATCTATTACTTACCCGTCAAAAATAATAAAAGACACAAA GATGTATAACTCCTACTCTCAAAAAAGTAGTGTGTTACAGTAATGAAGAGAATGGTGG CTGATGGTGGATAAACAGAAATTATTTGAAGACCTACTATGTGCCAATACTTGCA [G, A] TGTTGTCTTAAGTTTATAACTGTCTGAAAGGTGATTATCCCATTCATTGATGATGG TACTGAGACTGAGAGAGATTGTGCTCTTATATTATGCAACAAATAAAAACCTAACGCT AGTATTAAAGCCAGTTGGGGCTCCAAAACCTAACATGAGCATTCTCCTTTAAAGATC TATGAATATGCCAGGGCAGTGGCTCACACTGTAAATCCAGCACTTGGAGGCCAG GTGGCAGATCATGAGGTAGGAGATTGACACCCTGGCTAATACAGTGAACACCCAT |
| 10467 | TTTGATTGCTAGAGTAATCAAATTATGTTGTTGGCAGGGCTGTAAGTAGGCCAATCTA CTCATACCTGATTATATCGTCAGCATTCACTATTATTATTTGTTCTAATAATATCT ATTACTTACCCGTCAAAAATAATAAAAGACACAAAAGATGTATAACTCCTACTCTCAA AAAAGTAGTGTGTTACAGTAATGAAGAGAATGGTGGCTGATGGTGGATAAACAGAAAT TATTGAAAGACCTACTATGTGCCAATACTTTGCAAGGTGTTGCTTAAGTTTATAACT [G, A] TCTTGAAAGGTGATTATCCCCATTTCATTGATGATGGTACTGAGACTGAGAGAGATTGTG TCTTCTTATATTATGCAACAAATAAAAACCTAACGCTAGTATTAAAGCAGTTGGGG GCTCCAAAACCTAACATGAGCATTCTCCTTTAAAGATCTATGAATATGCCAGGGCAGTG GCTCACACTGTAAATCCCAGCACTTGGAGGCCAGGTGGCAGATCATGAGGTGAGGA GATTGACACCCTGGCTAATACAGTGAACACCCATCTACTAAACAAACTT |

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| 10785 | CCCCATTCATTGATGATGGTACTGAGACTGAGAGAGATTGTGCTTCTTATATTATGC AACAAATAAAAACCTAAGCTAGTATTTAAAGCCAGTTGGGGGCTCCAAAACCAATGA GCATTCTCCTTTAAAGATCTATGAATATGCCAGGGCAGTGGCTCACACTGTAAATCC CAGCACCTTGAAGGCCGAGGTGGCAGATCATGAGGTCAAGGAGATTGACACCACCTGG CTAATACAGTCAAACCCCATCTCTACTAAAAATACAAAACCTAGCTGGCGTGGCA [C, T] GCACCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGATTGCTTGAACTCAGGAGG CAGAGGTTGATTGAGCCAAGATCACGCCACTGCACCTGGCAACAGAGCGAGAA TTTGTCTAAAAAAAAACCTATGAATATATGGACAGAGAGAAA GTACCATAGCAGTGAATAGCCAACGGTAGAAGTGTACAGTGGAAATTATGATTCAAG CTTAAGAGCTAAGCTTCCAAGGCAGAAGCTATGACTGTGGATGATGAAAACCTTCTGGG AAGGTGAACCTTAGCAGGCATTAAGGGTGGAGCAGATTGGTTGTGGAGTGGGAGGA |
| 10846 | ACAAATAAAAACCTAAGCTAGTATTTAAAGCCAGTTGGGGGCTCCAAAACCAATGAG CATTCTCCTTTAAAGATCTATGAATATGCCAGGGCAGTGGCTCACACTGTAAATCC AGCACCTTGAAGGCCGAGGTGGCAGATCATGAGGTCAAGGAGATTGACACCACCTGG TAATACAGTGAACCCCATCTCTACTAAAAATACAAAACCTAGCTGGCGTGGCAC GCACCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGATTGCTTGAACTCAGGAGG [C, T] AGAGGTTGATTGAGCCAAGATCACGCCACTGCACCTGGCAACAGAGCGAGAA TTTGTCTAAAAAAAAACCTATGAATATATGGACAGAGAGAAA TACCATAGCAGTGAATAGCCAACGGTAGAAGTGTACAGTGGAAATTATGATTCAAG TTAAGAGCTAAGCTTCCAAGGCAGAAGCTATGACTGTGGATGATGAAAACCTTCTGGG AAGGTGAACCTTAGCAGGCATTAAGGGTGGAGCAGATTGGTTGTGGAGTGGGAGGA |
| 10847 | CAAATAAAAACCTAAGCTAGTATTTAAAGCCAGTTGGGGGCTCCAAAACCAATGAGC ATTCTCCTTTAAAGATCTATGAATATGCCAGGGCAGTGGCTCACACTGTAAATCCA GCACCTTGAAGGCCGAGGTGGCAGATCATGAGGTCAAGGAGATTGACACCACCTGG AATACAGTGAACCCCATCTCTACTAAAAATACAAAACCTAGCTGGCGTGGCAC CACCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGATTGCTTGAACTCAGGAGC [A, G] GAGGTGATTGAGCCAAGATCACGCCACTGCACCTGGCAACAGAGCGAGAA TTTGTCTAAAAAAAAACCTATGAATATATGGACAGAGAGAAA ACCATAGCAGTGAATAGCCAACGGTAGAAGTGTACAGTGGAAATTATGATTCAAGCT TAAGAGCTAAGCTTCCAAGGCAGAAGCTATGACTGTGGATGATGAAAACCTTCTGGG AGGTGAACCTTAGCAGGCATTAAGGGTGGAGCAGATTGGTTGTGGAGTGGGAGGA |
| 13842 | ATGACCTTGTACTTAGCTTCCATCACAGTCTCCACCAACAGTATAGTGTTCAGTGGT GCTAGATGAATGAAAATAGATGGCAGTGACAAGAATAAGCCTGAATCATTGTCCTA GGGTAATGCTTTGATATTATGAGTTGAGGTTCAACAGGCTGTGCTGTAATACCT ATGGATGGTTTAACTCTGTGAGGCTCAAAGTTATGGGGTGAAAATCAGGTGTAAAGTCCA ATTGAAAGCTCATTAGCTCCGCTGGACTATTGTATGAGGGTCTAAATAAGGTAT [G, A] AGGTTCATCTCTAAATAAGAATTCTGATTCAAGCCCTGGGTTGCCATTGATGAT GAGCTTGTATGCATCTACGACTTGGTGTGCTCCAGGCTGTGCTCAGAAAGCACAGG GGAGCCCAGGGCATGGGAGGTCAGGTTGAGGAGGCAGGCAAACCTGGGCAAATGAGG CAGTGGAGGCTAATGAAATTGATACCCCTATGGTTAGGCGTGTCCATGTGTCATTG TTGAAACCTCTAGGATGAAAATAAGTTGAGAATAGCCTTACTTGTCTACAAAAGTA |
| 14103 | CCGCTGGACTATTGTCATGAGGGTCTAAATAAGGTATAAGGTCCATCTCTAAATAA AGAATTCTGATTCAAGCCCTGGGTTGCCATTGATGATGAGCTTGTATGATCTTAC GACTTGGTGTGCTCCAGGCTGTGTCAGAAAGCACAGGGGAGCCAGGGCATGGGAG GTCCAGGTTGAGGAGGCAGGCAAACCTGGGCAAATGAGGCAAGTGGAGGCTAATGAAAT TGATACCCCTATGGTTAGGCGTGTCCATGTGTTGAAACCTCTAGGATGAAA [A, G] TAAAGTTGAGAATAGCCTTAGTTGTCACAAAAGTAATATACATTACAGAAAGCT ATAGGAACAGAGACAGCAAACACAATAAAACTTGATAATTATAGTACTAAGGATACATT TTCATCTTTTGAACCTAACATTAAACATTAGATTATCTTACTGTCTTATA ACATGATTTTGCATATTACAACCTTAGGCTACTTTATTATTGCACATTCTTTA ATGGTTCATAAAAGCCACTGTACATATGACCTAAATTATTAAGCTGTCTCTTT |
| 14128 | CCTAAATAAGGTATAAGGTCCATCTCTAAATAAGAATTCTGATTCAAGCCCTGGG TTGCACATTGATGATGAGCCTTGTATGCATCTTACGACTTGGTGTGCTCCAGGCTGCTG TCCAGAAAGCACAGGGGAGCCAGGGCATGGGAGGCTCAGGTTGAGGAGGCAGGCAA CTGGGCAAATGAGGCAAGTGGAGGCTAATGAAATTGATACCCCTATGGTTAGGCGTGT CCATGTGTCATTGGTACCTAGGATGAAAATAAGTTGAGAATAGCCTTACT [T, C] TGTCTACAAAAGTAATATACATTACAGAAAGCTATAGGAACAGAGACAGCAAACCAA TAAAACCTTGATAATTAGTACTAAGGATAACATTTCATCCTTTTGAACTAACAA TTAAACATTAATGATTTATCTTACTGTCTTATAACATGATTGGTACATTACAACC TTAGGCTACTTTATTATTGCACATTCTATTAAAGTTGAGAATAGCCTTACT |

FIGURE 3, page 69 of 122

| | | |
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| | | ATATGTACCTAATTATTAAGCTGTCTCCTTTATGGGATATCTAGTTATTCCTT |
| 15560 | | TCAGATCCCAGCACTGGCACCTCACCTGCCAGCTACAAGTCCAGTGGAAAGGAAACT TCTCTTCTCATCAGTCCACAAAAGTCTGGGCCTGATGTCATTGGATAAAACTTAGG ACACATGCTCATTTCTGAATATGACACAGTGGCCAGGATATTGAGTCTTGCCTGACA TGGGCCTAGTGAATCATCATTTAGCAGCTGGGTAGTGAGAAGAACCAAAGATTGT GGATTAAAGCCAGCCCCACCAAAACCATA CGGACATGGGGAGGAATAATTCCCTCAAAGG [A, G] AATCAGGATGCTATTACCAAAAGAATGGAGATGAAATGCTTGAGAGGCAAAATAGATATA TATATATATTTGTCTATTAAGCATATATATATACACTATCTATATAGATGTAAA TGTATTATTGTCTATTTATGTATTGAAATAATACATTTACTCTCTATATA TATATCTATCTATATATAGATGCCCCATGACATCTTCAGAAAAGAAAATTCA ACAGGCTGGAGCTGAACCAATCCAGACACAAAAGTCAACATGCTAAAGTCAGAAGAGCCAC |
| 15657 | | GATGTCATTGGATAAAACTTAGGACACATGCTCATTTCTGAATATGACACAGTGGCCAGG ATATTGAGTCTTGTCTGACATGGGCCTAGTGAATCATCTTCTAGAGCTGGGT AGTGAGAAGAACCAAAGATTGAGATTTAAGCCAGGCCACCAAACCATACGGACATGG GGGAGGAATAATTCCCTCAAAGGAATCAGGATGCTATTACCAAAGAATGGAGATTGAA TGCTTGAGAGGCAAAATAGATATAATATATTTGTCTATTAAGCATATATATATA [-, A] CACTATCTATATATAGATGTAATGTTATGTCTATTTATGTATTGTAATA AATACATTACTCTCTATATATATTCTATATAGATGCCCCATTGCACA TCTTTCAGAAAAGAAAATTCAAGACAGGCTGGAGCTGAACCAATGCAGACACAAAAGTC CATGCTAAAGTCAGAAGAGGCCACCAATGAGACAGCACATACAAGGATTCTGGTGGTA AGTCAAGATCAGAAGTCAGGACAGGCAAAAGGCTGAAATTCAAGGCTTGAGTTAATCA |
| 15736 | | GACATGGGCCTAGTGAATCATCTTCTAGAGCTGGGTAGTGAGAAGAACCAAAGA TTGTGAGTTAACCGAGCCCACCAAACCATACGGACATGGGGAGGAATAATTCCCTCA AAGGAATCAGGATGCTTACCAAAGAATGGAGATTGAATGCTTGAGAGGCAAAATAG ATATATATATATTTGTCTATTAAGCATATATATACACTATCTATATAGAT GTAATGTTATGTCTATTTATGTATTGTAATAACATTTACTCTCT [A, C] TATATATATTCTATCTATATAGATGCCCCATTGCACATCTTCTAGAAAAGAAAAT TCAGCAGGCTGGAGCTGAACCAATGCAGACACAAAAGTCACATGCTAAAGTCAGAAGAG CCACCAATGAGAACGACACATACAAGGGATTCTGGTGGTAAGTCAAGATCAGAAGTCAG GACAGGCAAAAGGCTGAAATTCAAGGCTCTGAGTTAATCAAAGCTGTAGGGTCTTGG TAATCCTGTCCAGCCACGAGAACCTGTGTTACAGAACAGTTAGAAAGTCTAGCCA |
| 15914 | | AGATATATATATATTTGTCTATTAAGCATATATATACACTATCTATATAG ATGTAATGTTATGTCTATTTATGTATTGTAATAAAATACATTTACTCTCT CTATATATATTCTATCTATATAGATGCCCCATTGCACATCTTCTAGAAAAGAA AATTCAAGACAGGCTGGAGCTGAACCAATGCAGACACAAAAGTCACATGCTAAAGTCAGAA GAGCCACCAATGAGAACGACACATACAAGGATTCTGGTGGTAAGTCAAGATCAGAAGT [C, T] AGGACAGGCAAAAGGCTGAAATTCAAGGCTCTGAGTTAATCAAAGCTGTAGGGTCTT GGTAATCCTGTCCAGCCACGAGCAACACTGTGTTACAGAACAGTTAGAAAGTCTAGC CATTCAACCCACATAGAACGCACTGGAGGTGTCCTCCAGGCCACTCTGATAATAAGTT GAGTTGTCGGCTGAAAATGTTGCTGATCTGAGGCCACCAACTCTGTCCCAGTGAC CAGGACATTCCTGCTACTCAAACACTCAAGCTATTGTCACAAACTCTTAAACAGTC |
| 16657 | | ATGAAGGAGGCTTAAACCTCTGTTAACAGCAGAGATCTAAGCTGGCTCCTGTCCAAG GCAAACAGGGCAGTATGGTCTTACATAGGTGATGGATTACAGGGACTGATATCCT AAGACTAACACTGATGAGGCACAAGACTGTAATGATTGAAAGTGGTTAGCTACAAAGG TCAACTGATTGGGGAAAGGTGCACTTGTATTCAATAATTGATATTGAGCATTGAG TGGTAGATGAGATTATTGCAATTATTCTCTCCCTCAAACCTCTGGAAAAAA [A, -] ATATAACTCCTGCTTCATTAATGTCACATTGGTCAATTGACATGCTCTGGCAACTTAG ATATTAGTAGATATGTTGAAGCAGAGATTGAGAGAACATGCCAGAGAGCCTGCT CGTCTCATGAGAACAGGTAATACAGTAAGTAGAAGTGTCCAGTCACCCACAGGCCACA GACTAAAGTTGAAGCAGAGCTATCCAGCTGACCTGAAATCTGTGAGCATTGAG ATGCTCAATGTTATACCACTGAAATTGGAATGGTTGTTGCAGCAATAGCTGGCC |
| 16658 | | TGAAGGAGGCTTAAACCTCTGTTAACAGCAGAGATCTAAGCTGGCTCCTGTCCAAG CAAACAGGGCAGTATGGTCTTACATAGGTGATGGATTACAGGGACTGATATCCTA AGACTAACACTGATGAGGCACAAGACTGTAATGATTGAAAGTGGTTAGCTACAAAGG CAACTGATTGGGGAAAGGTGCACTTGTATTCAATAATTGATATTGAGCATTGAG GGTAGATGAGATTATTGCAATTATTCTCTCCCTCAAACCTCTGGAAAAAA [A, -] TATAACTCCTGCTTCATTAATGTCACATTGGTCAATTGACATGCTCTGGCAACTTAGA TATTAGTAGATATGTTGAAGCAGAGATTGAGAGAACATGCCAGAGAGCCTGCTC GTCTCATGAGAACAGGTAATACAGTAAGTAGAAGTGTCCAGTCACCCACAGGCCACAG |

FIGURE 3, page 70 of 122

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| | | ACTAAAGTTGAAGCAGAGCTATCCCAGCTGACCTGAAAATCTGTGAGCATTGTAGGAAA TGCTCAATGTTATACCACTGAAATTGAAATGGTTGTTGCAGCAATAGCTGGCCA |
| 17099 | | ACAGTAAGTAGAAGTGTCCCAGTCACCCACAGCCCCACAGACTAAAGTTGAAGCAGAGC TATCCCAGCTGACCTGAAAATCTGTGAGCATTGTAGGAAATGCTCAATGTTATATACCA TGAAATTGAAATGGTTGTTGCAGCAATAGCTGGCCAATAGAACCAACCAGCGTGTG TTCCACACTTGCTAGGCACTGAGGGAACATTGAAATGACAGACATAGTCCCTGGCTCC ATGGAGCACTATTGTAGCTAGGAAGATAGACAATGAATACTTACAATAAAATATATA [T, G] AGAGAGATCATTACTAGGGTCATAAAAGAAAATAGGATGTAGTGACATCACCACTATGGTA GAGAAGAACACCTTAAAGTAAGTGGTCAAAGAAGGCATTCAAAGGAGGTGACTCTGA GTCAGATATAAAAGTTGAAAGAGGCCAATGAGAGTAAATTCCCTGTGGAATGTGA AATCCAGCCCCATGGGCAACTGGATTGAGAATCTTGGCTAGGCAGAGGAGAATGAGGT GCCCTGAAAATCTCTGCAAACTAGGTCACTCACTTGTCTTAGGGCAGATACTAGCTT |
| 18139 | | TAGAAAGGAGTCTCCCTTGAGCAAGCAGGATAAGCTCCAGCATCCCTAATCTATCTGGTA AAGGCTATAGAGGTGTCACACCTACAAGGGAGAACAAAGAACATCTAATGCAAGCCCTCT GTTTAATCTTCACTCCAGACACTGAAAAGCAAGAACATGTTGGGGACAGGAAGCTCACAGC GCCCGCATGGAATTAGACTCCAAGTAGTTATTAGCTTGGAAAATTATTTAACTTAC ACTGCACTTACTAGCTTCTTCTTACTCCAAGATCACTCTGAATACTTAAAATATGG [T, A] TGGACATGGTGGCTCACACCTGTAATCCCAGCACTTGGGAGGCCAAGGGGGCAGATCA CTTGAGGCCAGGAGTTCGAGATCAGTCGGGCCACATGGAAAACCCCTGCTCTACTAAA AAATACAAAAAAATAGCTGGCATGGTGGCACACACCTGGAATCTCAGCTACTTGGGAGGCT GAGGCACGAGAATTACTTGAATATGGGAGGTGGAGGTGAGCAGTGGCAAGAACATCAAGCCA CTGCACCTCCAGCCTGGGAGAAAGAGTGAGACTCTCTCAAAAAATAATAATAAATA GACATTCTATATCTGCTGTAAATATGTAGGCAGTAGCAACATCTGCCCTATTACAC |
| 19303 | | ATTATTGAAGACTATTCTGATCATCAAGCTTCTGTCTAAAAAAATATCAGTGGCTT CCCACATTTAAGTCTAAACTCAGACTAAATATGAGTCTCCATAATGGGTCTCT GCCTGCCTTCTTTGAGACTTACCTAAACCCCTACACTCTATGTTCCAGCCAAACTAGAC TACCTAGTGTGCCCCAAACATGCCCTCTCAGTCTTCACTGCTTGGTCACTACTGAT TCCATCTGAAATAGTCTCTACACATTGAGCACCCACTCTCTACTAAACCCGGAGATA [C, T] GCAGAAAACAAAACCAGCAAACCTCTGTACCCCTGGGTTTACGTCTGGGAAACAAAT ACATATAATGATTCAAATACTAGTTAAATGATACAAACATAGCCAAATAGAGTCATGGG ACAGAGAGTGGCTGAGCTGACTGCTACATTAGATGGTGGTCAGGGAGGACAGGCATCACCTG AAGAGATGATATTAACTGAGCCTGTTGCAATAGAACATTCTGCACTGAGTGG GACATTCTATATCTGCTGTAAATATGTAGGCAGTAGCAACATCTGCCCTATTACAC |
| 19501 | | ACATGCCCTCTCAGTCTTCACTGCTTGGTCACTACTGATTCCATCTGAAATAGTCTC TACCACATTGAGCACCCACTCTACTAAACCCCTGGAGATAACCCAGAGAAAACAAAACAG CAAACCTCCCTGTACCCCTGGGTTTACGTCTGGGAAACAAATACATAATGATTCTAA ATACTAGTAAATGATACAAACATAGCCAAATAGAGTCATGGGACAGAGAGTGGCTGTA GTGCTACATTAGATGGTGGTCAGGGAGGACAGGCATCACCTGAAGAGATGATATTAA [C, A] TGAGCCTGTTGCAATCCATAGAAACTTCTGCACTGTTGGGAGACATTCTATATCTGTC TGTCTAATATGTAGGCAGTAGCAACATCTGCCCTATTACACATTAGAAATGAGTGG ATGACTGAGGAACCAATCTTCACTGTAATTAAATTAAATTGTAATTAAAAAGT CACATGTCAGTACTGCTATTAGACAGTGTCAATCTAGATTCTAGAAATTTCAG ACAAGAAAAAAACAGTAAGCATAAAGGCTTAAATGAGAGTGAGTGTATATTCAAAG |
| 22852 | | GAACCCAGGGCTTTATTGACCTGGTTGGCTGAATCATTGTATGTAGAGGTGAAGTAAAG GCAGTGCAGGTGCAGGTGCAGTCACAGATCATGTTTACTGTGGCATGTATAGGAA ATGTTGAATAAGCTCATCTCTGGATGGGATTTAGTACGTTAAATAAGGGAGTCACCA AAGTTCATCTCCAACCTAGGCATCTAACCAAGTTTTGTTTTGGCTCTCTGGAA TTTTTTGAAACAAGAACATCAAGGTGCAACAGTACAAGTGTGAATTCTCATTGTT [G, A] TACCCACAATCTGGGACCCCTGAGTTATAACTCTTTGCTGAATTGTGAATAATGTC TTGAGTTAACTCTGTTTACATATGGTAAACTAAGGCTGAGAGCATAACAGGGAA TTTACTGCACTGCAAGGTGAGCAGGCCAGGTACAGTGTCAACACAGAACATTGACCGTCAC CCAAGGCCCTCTACTCTTCAAGGCTCCCTGTCATTGGAGGCCAGTCCTCAAACAGT TTTACCCAGAACAGGAATTGCCGGTATTCAAGAACAGTGGCAGACTCGGGGAGGC |
| 23210 | | GTCTTGTGATGTTAATCTGTTTACATATGGTAAACTAAGGCTGAGAGCATAACAG GGATTATCTGCACTGCAAGGTGAGCAGGTACAGTGTCAACACAGAACATTGACCGT CACCCAAGGCCCTCTACTCTTCAAGGCTCCCTGTCATTGGAGGCCAGTCCTCAAAC AGTTTACCCAGAACAGGAATTGCCGGTATTCAAGAACAGTGGCAGACTCGGGGAGG GGCAGTGTGCAATTGGCTAGGCTGGCCTTGCTGCCATGCTTCTTCTCGTCTGC [A, G] AAGCCAGTTCTAGGTAACCTACCTGCACTGAGATGTCTACCCGAAATAACACCCAGCCTG TACACTGCTGTTACACACAAACAAAGCAAATCTGCTGCAAAAGAGGGCAGGTTGAA |

FIGURE 3, page 71 of 122

0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900 3000 3100 3200 3300 3400 3500 3600 3700 3800 3900 4000 4100 4200 4300 4400 4500 4600 4700 4800 4900 5000 5100 5200 5300 5400 5500 5600 5700 5800 5900 6000 6100 6200 6300 6400 6500 6600 6700 6800 6900 7000 7100 7200 7300 7400 7500 7600 7700 7800 7900 8000 8100 8200 8300 8400 8500 8600 8700 8800 8900 9000 9100 9200 9300 9400 9500 9600 9700 9800 9900 10000

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| | ATAAATTATTTAGTGCACACATATAACGTCAATGTAAAAAACAGAAAGAGGCAGGTTG CATAGGGAGGCTGAGGAGGAGATGCTGAGATTCACTGAGGTTGACAAGATAAGAGGA GGAAAGTTGCCCTGGCCCTGAGGCAGAAAATTAAATTGCCCTAGGCCTTAAGTGAG |
| 24040 | ATTTGGAAAGGTACTGCATTTCTATGGCCCAAGAGGCCAAAACACAGACAAAGTGAGTA CAACATTTGGTCTGCAGATTGACTCCACAGCACAGGCCATTCTAAGTGTGAG TGGTAGCAGTGGCGAGGGTCCCTCTAGTCAGCAACCTCCAACTCAACATGGCT GTTAGAAACCTGGCTCTTGCAGAATTGCTTACACTCTACCTGATGACCCAGTGC CTGTGATACCACCGTTAGAAAGTCATCTAATTGCGTTAAACTTGTCTCTCCAGCATCC [G, A] TTGAATAGCAGAACAAATCTCTGACCATAGTCTAAATTCTGTGGGCTGGCACTATGG ATTTAATTGTGCCCTCCAAAATCCGTTGTTAAAGCCCTAACCTCCAGCATGATGGTAG TGGGTTAGCTGCTCATGAGGATGTCATCCTCATAATGATTAATACTCTATAAGAGA CACCAGAATACTGCTCTTCTCTGTGCACATGCACCAAGTAAGGTATGAGA ACACACAGCAAGATGGCGGCCATTGGCAAGTCAGGAAGAGAACCTCACCATAGTGGCACC |
| 24536 | TCTTCTCTTTCTGTGCACATGCACCAAAGTAAGGTATGAGAACACACAGCAAGATG GCGGCCATTGGCAAGTCAGGAAGAGAACCTCACCATACTGGCACCAGTCTCGCACTTC CAGTTCCAGAACAGTGGAAAAAGAAATTGTTGTTAAAGTCACCATTCATGATATT TGGTATGGCATCTGAGCTACTAACACCACTGGTAATTAAAGGTGTTCTTCCATGAAA AATGAAATGATGGTCAATAGGAAGCAAACAGAAGCTTAAGCAGAAGGGCAGAAAGGAGT [C, A] ATTTGGGAACCAGAGGGAGTCTATAGAGACTAGACCTGGGATTTGACAGTTCTGCTGA GGGCTGGCCCTGCCCCAGCCTCTTCACTTCTCTCATCTCACTAGACCAAGAAAATA TGCACATCTGTTATCCACAAATACTCTGAATTCCCCGCCAACGCAGATCCCAGGAAAA CCTAACACAAGCAGAACAGTGGAGGAGATGCACGGGTATTGGTGTTCAGGAAAAA GGCTTGTATTTTGACACCCTCATCTGGTCTCTTAATTGTCCTGAGTCAGTGAGCCA |
| 25125 | GTCAGTGAGGCCACAGTGAAGTCCAGAGAAAAAAATGGAAATAGGAGAACGGCTTAAAC CTCAGTTTGTGCTGATTAACCTGTGATCTGGCAACCCACTGATGTTCTTGT CAGTTCCCTCCATGACCTGACTACTTAATAGCCTCTATTCTCCATGATCTCTGTT GAACAGATCATAAAAGAGTAGTGTGATTGAATCCAGACTTTACTGTTACTGTC CATTAATTCTCTGACCCACTTACACCTGTGCAACCTGAGGCAAATTGTAATATCTC [-, A, T] GTTTCAGTTTATAGCTGTCAAATGGGTTAATAACAAATCCCTATCACAAGCAGTCTT ACAGGCATGGAATGAAAATTGGCTGTGAAATGCTGAGTGTAGGCTATTATATTCA AACTTACACTCTATTGGTCAACACCATTGCTGAGTCCTCCCCAACACCCCTGCTGC AACACACCTCTAACGCTTGGCTATGCTGGCTAAAAAACTCTAGACACCCCTGATGACC CAAATGAAAATCTCTGAAACCAAGGAATGCTTCTGGCTGTAGGTGGCAAGCATCA |
| 25167 | GGAGAACTGGGCTAAACCTCAAGTTTGTGCTGATTAACCTGTGATCTGGCAACCCA CTGATCTTCTTGTGTTGTTGTTGACTTCCCTCATGACCCCTGAGTACTTAAAGCCTCTATT CTCCCATGATCTCTGTTGACAGATCATAAAAGAGTAGTGTGATTGAATCCAGACTTAC TGTTACTCTCAAATATCACATTAAATTCTCAGCCACTTACACCTGTGCAACCTGAGGC AAAATTGTAATATCTGTTGTTGACTGTCATGTCATGTCATGTCATGTCATGTC [C, T] CTATCACAAGCAGTCTTACAGGCATGGAATGAAAATTGCTGTGAAATGCTGAGTGT AGGCCATTATATTCACTAACTTACCTCTATTGGTCAACACCCATTGCTGAGTC CCCCAAACCCCTGCTGCAACACACCTCTAACGCCCTGGCTATGCTGGCTAAAAAACTTC TAGACACCCCTGATGACCCAAATGAAAATTCTCTGAAACCCAAAGGAATGCTTCTGGCTG TGTAGGTGGCAAGCATCACACTCTAACGGAGTAAACTGTGCTTCTGCAACCATTAT |
| 25623 | TGGCTATGCTGGCTAAAAAAACTCTAGACACCCCTGATGACCCAAATGAAAATCTCTG AACCCAAGGAATGCTTCTGGCTGTGAGGTGGCAAGCATCACACTCTAACGGAGTAA AACTGTGCTTCTGCAACCATTGGCCATAACCCATCATGTTGTGATGCGTTTTTA CAAGATTGCTTGTGCTATGCTTGGGTATATGCAAGAAATCATTATCCAGAC CAATGTCACATGGTTTCTCCCATGTTCTCCAGTCGTTTACAATTTCAGGACTTA [T, C] ATTTAAGTATTAATTCAATTGAGTTGATTCTGTGTAAGGGATGAGAAAACGGTCAA TTCAATTCTCTGCTGATGTGAAATAGCCAGCTTCCGGCACCATTTATTGAAAGAGACTATC CTTTCCTCTGCTGCTCTGGCACCTTGTAGAAAATCAGTTGATCATAGACTTGTAG GTTTATTCTCAGCTGCTATCTATTCCATTGGTACATATCTGTTTATGCTAGTA CCATGCTGTTGATTAGTATAGCTTGCATATATTGAAATCAGATCATGATGCC |
| 27143 | CAACAAAGTGAAGTAAATAATATATTATGATTTCAGGAAATGAAAATGACTGGAT TTAAATGTTCTCACCAAGAAATGACAAGTATGAGGTTATGAAATACGTTAATTAG CCTGATTGTTCATGCCACAATGTATATGCTATCAAAAGATCACACTGTAACACAGAAA TAGATATTATGCAATTAAAACAAATTGTTAAAAGGCTATTGCTTGCTGAATC CCACATGTCCTGGGCTAGGGTAGATGCTTTTAACCAGATTGTCAGCTTAGTC [C, T] GGTGGTCATAAGCATTAAAGTGTGAGGGTGGCAATGGACAAACAGATGAAGGGTG |

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| | CATAGATTAATAGAAGTCTACCATATCTAGGCTGGGAGTGGTGGCTCACACCTGTAATCC CAGCACTTGGGAGGCCAAGGTGGCGGATCATGAGGTCAAGGAGATTGAGAACATCCTGG CTAACACGGTAAACCCCTGCTCTACTAAAAAATACAAAAAAATCAGCCTGACGTGGTGGCG GGGCCTGTAATCCAGCTGCTCAGAAGGCTAAGGCAGGAGAATCACTGAACCTGGGAG |
| 27211 | TTCTCACCAAAAGAAATGACAAGTATGTGAGGTTATGAATACGTTAATTAGCCTGATT GTTCATGCCAACATGTATATGCTATCAAAGATCACACTGTAACACAGAAATAGATATT ATTTGCAATTAAAACAAATTTTAAAGGCTATTTCTTGCTAACATCCCACATGT CTCTGGGCTAGGGTAGATGTTTAAACCAGATTGTCAGCTTAGTCCGGTGTTC ATAAAGCATTAAAGTGTCTGAAGGGTGGTCAATGGACAAACAGATGAAGGGTGCATAGAT [T, G] AATAGAAGTCTACCATATCTAGGCTGGGAGTGGTGGCTCACACCTGTAATCCAGCACT TGGGAGGCCAAGGTGGCGGATCATGAGGTCAAGGAGATTGAGAACATCCTGGCTAACACG GTGAAACCCCTGCTCTACTAAAAAATACAAAAAAATCAGCCTGACGTGGTGGCGGCGCTG TAATCCCAGCTGCTCAGAAGGCTAAGGCAGGAGAATCACTGAACCTGGGAGGCAGAGAT TTCAGTGAGCCAAGATCACACCACTGCACTCCAGCCTGGCAACCGGAGTGAGACTCTGTC |
| 27383 | CCACATGTCTCTGGGCTAGGGTAGATGTTTAAACAGATTGTGTCAGCTTAGTC CGGTGTTCAATAAGCATTAAAGTGTCTGAAGGGTGGTCAATGGACAAACAGATGAAGGGTT GCATAGATTAATAGAAGTCTACCATATCTAGGCTGGGAGTGGTGGCTCACACCTGTAATC CCAGCACTTGGGAGGCCAAGGTGGCGGATCATGAGGTCAAGGAGATTGAGAACATCCTG GCTAACACGGTAAACCCCTGCTCTACTAAAAAATACAAAAAAATCAGCCTGACGTGGTGGC [G, A] GGCCCTGTAATCCCAGCTGCTCAGAAGGCTAAGGCAGGAGAATCACTGAACCTGGGAG GCAGAGATTTCAGTGAGCCAAGATCACACCACTGCACTCCAGCCTGGCAACCGAGTGAG ACTCTGCTCAAAAAAATAAAAGAAATCACCATACTACTTCTCAGGCATAAATA TGATAACTATTCCTTTAATTCCCATTGGATAAATAACTGTTTATAAACATCTAGTTGC CAGACCCATGCTGGAGTCTCAGGGCTAAAGAAATGCTCCCATTGCTATGTGCTA |
| 27553 | ACCTGTAATCCCAGCACTTGGGAGGCCAAGGTGGCGGATCATGAGGTCAAGGAGATTGA GACCATCCTGGCTAACACGGTGAACACCCCTGCTCTACTAAAAAATACAAAAAAATCAGCCTG ACGTGGTGGCGGCCGCTGTAATCCCAGCTGCTCAGAAGGCTAAGGCAGGAGAATCACTT GAACCTGGGAGGCAGAGATTTCAGTGAGCCAAGATCACACCACTGCACTCCAGCCTGGC AACCGAGTGAGACTCTGCTCAAAAAAATAAAAGAAATCTACCATACTACTTCTC [A, T] GGCATAAATATGATAACTATTCCTTAATTCCCATTGGATAAATAACTGTTATAAAC ATCTAGTGCAGACCCATGCTGGAGTCTCAGGCTAAAAGAAATGCTCCCATTTGCT CTATGTCTAGTCACATCAATCCCACACTGATCCCCACAGCACCCCTGGGGAAAGAGAG TAGTTGATAATCTGATTTACCAATGAACAAAGGCTCAGAAAAGACTAGTTGATCCTAAA AACACACACAGCATTCAATGTTGAAAAATACCTGGATTGAGTCCCTGTACACTGA |
| 29141 | AAGTAGCTGGCAGCTCTTAAAGAGATCACAGCTGGAGATGCGTTCACTAATCCA CAGATAATCCTCTGTTCTTTCTGAACCCCATCTAGTCATCAGCAAGTCTG CAGTGTAGTTACAAATATTTGAATCCACACACTTTTCAAAAAAAATCTTAC ATAACCCCGTATCCCTCACACTGTGATCTTCCATATCACTACATTAACCTCTAAC CTGCTCTCTGCTCCCTCCAGACAATGTTCCACCTGGAGGCTAAAGTGACTIONTAAAC [C, G] TATTGAGCTGAACATTCCATTCTCTGCTTAAGTAAATGAGACTCCCTCCTGGCTA CAAGGCCCTCATGAACCTGCTCCCTAACCTTACCTCTTGCCTCTCATGTAAC TGGATTTAGCCTCCAGGCCCTCCCTCAGTCCCTAAACAGGCCAAGCTGCCAGGGCCT TTGCAGCTGGCTTCCCTTGCTGGATGCCGTTAAATCTCATGGCTGGCTCTAGT TCACTATTCAAGGCCATTCCACGTTACTTCTCAGAGAGTGTCCCTGAACACTAA |
| 30549 | TGGCAGCCTGTTAGAAATGCCAGTTCAAGGCCAGGGCACGGTGGCTACGCCCTGTAATCC AGCACTTGGGAGGCCAGGTGGCAGATCACAGGTCAAGGAGATCGAGAACATCCTGGC TAACACCGTAAACCCCGTCTACAAAAAATACAAAAAAATTAGCCGGCATGATGGCAG GCACCTGTCAGTCCAGCTCAGGAGGCTGAGGCCAGGAGATCGCTGGATCGGGAGTG GCACTGCACTGCCAGTCACTGCCAGCTGGACGACAGAGCAGACT [C, T] CATCTAAAAAAAGGAAAGAAAAGAAATGCCAATTGAGGGTCTCAGGCCGGACCTCC TGAATCAGAAACTTGGAGTTGGGCTCAGCACTCTGTTAACAGGCCCGCAGATGAT TCTGAAGATGCTCACAAAGTTGACAACCACTACCTATTGAATGACTTAATTGAG ATACTAGATCAGACTAGATCAGAGTCTGAAGTTTCTGTAACTCAGTTCTCATTTAAC GCTGTGAGTGTAGATTGCTCTCAATCCACGGCTGAAGAACCGAGATTGACTGAATAAA |
| 30984 | CCAAAGTTGACAACCACTACCTATTGAATGACTTAATTGAGGATACTAGATCAGAC TAGATCAGAGTCTGAAGTTTCTGTAACTCAGTTCTCATTTAACGCTGTGAGTGTAGA TTGCTCTCAATCCACGGCTGAAGAACGGCAGATTGTGACTGAATAAAGCCAGTTACCC CTGACCCCTGGCTCAGGACCTGCAAGCATGTAACACATCATCCAGGAGTGCAGGCCCTGTG AAGACAGCTGACCTGAAGGGCATGGAGTCTGTGACCCCCATCCACCTTGAGAACGATGCTT [C, T] |

FIGURE 3, page 73 of 122

AACCAGCAAAGGAAAGACAGTCTAGACAAGGAAACATCATCAAGTCTCTGTAGGAAT
ACTTCATATCAGACCATATTGCCATGTGTTGAAGATTATTATATAATGATAATAATTAGT
ACAATAGTAATACCATACATTGATTACATTGACATTTCAGGCATGTTATATT
CTAATAATCTATTCCCTCTGATAATTATTCTCCCTTAAAATCTCTCCAGTTA
CACAAAGTAGAGTAGGAGTGAAGGATTGTTAATCTGTTAATCTGCCTGTCAGGGAGA

31266 ACCTTGAGAACGATGCTTAACCCAGCAAGGAAAGACAGTCTAGACAAGGAAACATCAT
CAAGTCTCTGTAGGAATACTTCATATCAGACCATATTGCCATGTGTTGAAGATTATT
TATAATGATAATAATTAGTACAATAGTAATACACATACATTGATTACATTGACATT
TTCAAGGCATGTTATATTCTAATAATCTATTCCCTCTGATAATTATTCTCC
TTAAAAATCTCTCCAGTTACACAAAGTAGAGTAGGAGTGAAGGATTGTTAATCTGTTA
[A, T]
CTGCCGTGCCCCAGGGAGAGGCAAAAGTAAGAGATGTATCTGATTTCATGGCTGTTAG
GTTCGTAGTAACAATAGCTAATGTGTTAGGGAGCTTAAGTGGGCCAGGCCTTTGCTA
GATATGTCAGTGTATTAAATTAAAAAACCTCTAGATCCAAGGCTTCAGACTCCAA
CTGCTCTCCAGCAAGCACGGTTCTTCTTCACTCTGAATTCTCAGACT
CTCTAGTCATTCAACTTTATTAGCTTACATCAGAG

31425 TTTGATTACATTTGACATTTCAAGGCATGTTATATTCTAATAATCTATTCCCTC
TTGATAATTATTATTCTCCCTTAAAATCTCCAGTTACACAAAGTAGAGTAGGAGTG
AAAGGATTGTTAATCTGTTAATCTGCCGTGCAAGGGAGAGGCAAAAGTAAGAGATGTAT
CTGTTGATTTCATGGCTGTTAGGTTCTGTTAGTAACAATAGCTAATGTGTTAGGGAGCTT
AAAGTGGGCCAGGCTTTGCTAGATATGTCAGTGCTTAAATTAAAAAACCTCTAGA
[T, C]
CCAAGGGCTTCCAGACTCCCACTGGTCTCCTCAGCAAGCAGCAGCTTCTTCTTCA
TCACTCTGAATTCTCAGACTCTAGTCATTCACTTTATTCTTACATTCAACTTTATT
TAGCTTACATCTACAGAGAAGGTGAAGGCCACAGAGGTGAATGTGCTGGCCCACAAA
TTGCTAGCTCTCAGGGGAATCCAGAACATGCAGTGCCACCCACAGTGGAGCCTTGA
GGCACAAAGGCAAATTATTACCAATCAAAAGTTGCCAGATTCAAGATTCTCTGCAGTTC

32198 GAAGGAATAAAAGACAGAACAGACTCCTAGATCTAGTCTAGAGGCTCCATAGTCTGTT
CTTACAAATGCTGTAACCTTGGGCCAGCCTCCAAACCTATTCAACCTTCTGCTTCT
CCATGAAATAAGAACCTGGATTCTACTCACCTGATTCAAGGGAACCTCTGAAAATCA
AACGTAAGAATTAGTAATGTAATAAAACAAATAAAATAGCTAACATCTATTGAGCAAT
TATATTCTTACTTCACTGGCTTATTCAATTAAATCATGAAAGCATTCCATGAAGCAG
[A, G]
TAATTTTCTGAGGCCCCAGTTATAGATTATAAAACAGAGGTTAGTAATTACTAAGTT
CACCCACCTTAACAAGCAGTGGAAAGGATTGAAATTCAAGATCTGCTGATCTTGAA
CCTTACTATTAAATCACTACCCAGAATTCAAAACAAATGAGGAAACTCTGCGAGT
CATGCTGATGAAATGAGCGGAATCAAAAGAGGGAACAAAGTGAAGGGCTGGGTCAAG
GCTGTTAGCTGGCATGAAGGATGGAAGCATTCCAGATACCATGTCCTGAGTGAGCAC

33129 CTCAGCTTGCTGCCCTCCCTTGAGTCTGGACAGAACCATCCTCGTGGTGAGCTTCCA
GAGCTTTGGGAGTGGCTCAGGGACCAATTGCTTGAAGAATTGAAATAGCTT
CAGATGCTGCTGGTGAAGCTAACGGACAATAATGAAAATAATGATAGCTGACA
TTCATTGAACTCTAACATCAGGGCTTGTAAAGCATATTAGCTGACTGTTG
TGTGCTGCTGCTCTATTACACAAAGATATTAGCACACCCACATCACATTGAA
[T, C]
CTGATTATGCTGAGGTTGAGTGCATTGCTGCACACTAGTGGTGAATGACATGTTT
ATAGATATTAAATATTAAATTGATTACAGTTGCTTAAATTTCAGGTCAG
ATATATTATTCTGCTGAGACATACCTTCTAGGCCCACCTTCAAAAGACTGAG
CCCAGACACTGAGTTCTCATGCCACCTGGAGAAAGTGAACCTGTAATTATTGTTG
GAGCTGAGTGCCTCACACATTGCCGTGGATAAGTGAAGACTCTGGAATTAACTGCC

33292 TAATATGATAGCTGACATTCAATTGAACTCTAACATCAGGGCTTGTAAAGGCATATT
GGCTCTATGCACTGTTGCTGCTCTCATTACACCAAAAGATATTAGCACAC
CCACATCTCACATTGAAATCTGATTATGTTGAGTTGAGTGGCATTGCTGACACTAGTT
GGTGAATGACATGTTTATAGATATTAAATTATTAAATTGATTTACACTTGT
TTAATATTCAAGAGTCATATTATTATTCTGGTCAGACATACTTTAGGCCCACC
[G, C]
TTCAAAAGACTGAGGACCCAGACACTGAGTTCTCATGCCACCTGGAGAAAGTGA
TGTAATTATTGTTGGGAGCTGAGTCTCCACACATTGCCGTGGATAAGTGAAGAC
TCTGGAATTAAACTGCCCTAGGTTGAATCCGAACCCACTACTTCTAGCTGTTAATC
TTGGCAAGTGCCTATCATTGCTCAGTTCTCAGTTGCAAGATGGTTATTGT
AAGGACTGAATCAGAGAACACATAAAAGTTAAACTACCTGTAACCTGATCATGG

34124 ATGAGTTATTCTGGTCATGCTGCAAGTCCAACACAAATGGTGGGGAGTGGGAGA
GGCATTGCTCTCATGCTCTTAGGGACCAAGCTGAAAGAGGGACCATCCTAACATGA
TCACAGTGTCAAAGGAACCTATGTAATAAGCACAACCCCTGGCTCTAAAGCCTTATTCCA
AGGTACGGACATATTCCACACAGTTGATGGATCAAGCAAGTTGATGGCCAGGCT
TAACCTTAAAGGAGGTAGAAATGAAATCTACCATGTAACCTGTAACCTGATCATGG

| | |
|-------|---|
| | [C, T] |
| | AAATGTTATCTCAGAGGAAGGTTTGAGGATCAAATTAAATTATCTATGAAATTATCAA AATAGGGCTAGAACATAGAAAAATCTTCTTAATGTTAGGTATGAATTCTTATTAA ATGAATTGCCTCTTGTAGCAGCTCCTGTATAAATCTCCACCTGATTCCTGTTC CTGATATCTCTCTCTCTCTCTCTCTCAATGATCCATCTGCAGACCTG ATCCATTATTATTAGACCTCTCTTATCATGTCATCTCTGTCTCCCTGTCTG |
| 34668 | CATTTATTAGACCTCTCTTATCATGTCATCTCTGTCTCCCTGTCTGATT GGGTAAGTTCAGAGCTAACAGAAGATACTGAGGGCAATCCGTAACTCATTCTAACCT ACTCTGAATTTCCTCCACTTTCTCTAACGGCTGTGTTCTAACTGGAAGGACTCAT CACTGTTCCAAATTAGACTGGCACATTCTAACCCCATCCCTGATATTCTCATTCTA TTGTATAATCTCCCTCTCAAATGCCCTTGCGCTTCTGCAATTATACCCCTCATTAT [A, G] CAGTTACCACTTCTCCAAGAACGCTCATTTTCAACCACAGCCTGAAATGATTCATT AGGGCTGAACCTCCACAGTACTACTCATTTGGCTGAACCTTACTACTCATTTGACCCCTGA ACTCAGACTGCTTGAACATTTTTTTATTATGCTTATGTTGTTACTGTTGTTGAA AGAACACAGACAGCACAGCATCAGACTCATATTGATCTAAATTCAAGGTCTGTCATTGACTG GCCTTGACACCCCTGTGCAGGTGCAGCCATGTTCTCGAGCTCCGCCCCCTTGTGACA |
| 34807 | CACTTTCTCTAACGGCTGTCTAACTGGAAGGACTCATTCACTGTTCCAAATTAGAC TGCCACATTCTCCACCCCATCCCTGATATTCTCATTCTTATGTATAATCTCCCTCTC AAATGCCCTCTGCCCTCTGCAATTATATCCCTCATTATGCACTTACCCACTTCC AAGAACCTCATTTCACACAGCCTGAAATGATTCATTCAAGGCTGAACCTCCACAG TACTACTCATTTGGCTGAACCTTACTACTCATTTGACCCCTGAACACTCAGACTGTTGAAC [A, T] TTTTTTTTTATTATGTTATGTTGTTACTGTTGTTGAAAGAACACAGACAGCAT CAGACTCATATTGATCTAAATTTCAGGTCTGTCATTGACTGGCCTTGACACCCCTGTGCA GTCAGCCATGTTCTGAGCTCCTGCCCTTCTGTGACATGAAAGTGAATTACCTAT TTCATAAGAATGCTGAGGAGATAAGAATTGAAACAGTTATAGTGCACCATATAGGAG ATGACTCTCTCATAGCTGTGCCCTAGTATCAAGAACAGTACCTGCCAAATAATAG |
| 36025 | GAAGAGCTCTTGTACTGGATAACAAATCTTCTGGTAGGGCTTGTAAAGACAACCTA TCTATAAGGATGAAAAACCTTCTATCCTCTGGACTAGCTTCTGCATACTCAACTCA TTTAATTCCAGGCTAGATCACTCTAAAAATCAATGCATTAGAATTGAAATTATTTGTG TTCACCTAATTGATATAGTGTGCTTTCTAAATGGCACTAGGTTGAAAGTGAAGCTG GTCACACTTTTACAGTAGGCTCTCTAATAACACTGATTCTGTCTTGTACCCAGTG [C, T] CTTCTGTATAGTATTAGCTCAGGGATTGTACGTTGTTGCCAACAAACTTGTGATGC ATTGAAAATACAGTTCTAAATTGCAACTCCAGTGAACCTGTAATATAGTAAGATCTA CAGGTCTGTAGGAAATTGCTACTGAAAGTCAAGATCACTCATTAGTCCATCTCA TAGTTGATTGAGTCCAGTGGAAATTGCTATATTGCAACTGTCCTTGTATAAA TAGTGAACAGATACTTCCATCTTGTACCCAGTGTCTCTGTATAGTATTAGCTCAGGGATTGTAC |
| 36058 | CCTGGTAGGGCTTGTAAAGACAACCTCATCTATAAGGATGAATAAACTTCTATCCTCTG GACTAGCTTCTGCATAGCTAACTCATTTAATTCCAGGCTAGATCACTCTAAAAATC AATGCCATTAGAATTGAAATTAAATTGTTGTTCACTTAATTGATATAGTGTGCTTTCTAA ATGGCACTAGGTTGAAAGTGAAGCTGGTCACACTTTTACAGTAGGCTCTCTAATAAC CACTGATTCTGCTTTGTACCCAGTGTCTCTGTATAGTATTAGCTCAGGGATTGTAC [C, G] TTGTGGCCAACAAACTTGTGATGCATTGAAAAAATACAGTTCTAATTGCAACTCCA GTGAAACCTGTAATATAGTAAGATCTCACAGGTCTGTAGGAAATTGCTACTGAAAGT CAAAGATCACTCATTAAGTCCATCTCATAGTGTGATTGAGTCCAGTGGAAATTGCTA TATTGCGAGAACTGTCTTGATAAATAGTGAACAGATACTTCCATCTAGCACTGCC AGCTTAGGATCTTAAGGATCGACTATTACTTAACGTAGGATCACGCCATGGGACAC |
| 36061 | GGTAGGGCTTGTAAAGACAACCTCATCTATAAGGATGAATAAACTTCTATCCTCTGGAC TAGCTTCTGCATAGCTAACTCATTTAATTCCAGGCTAGATCACTCTAAAAATCAT GCATTAATTGAAATTAAATTGTTGTTCACTTAATTGATATAGTGTGCTTTCTAAATG GCACTAGGTTGAAAGTGAAGCTGGTCACACTTTTACAGTAGGCTCTCTAATAACAC TTGATTCTGCTTGACCCAGTGTCTCTGTATAGTATTAGCTCAGGGATTGTACGGT [G, C] TTGCCAACAAACTTGTGATGCATTGAAAAAATACAGTTCTAATTGCAACTCCA AACCTGTAATATAGTAAGATCTCACAGGTCTGTAGGAAATTGCTACTGAAAGTCAA AGATCACTCATTAAGTCCATCTCATAGTGTGATTGAGTCCAGTGGAAATTGCTA TATTGCGAGAACTGTCTTGATAAATAGTGAACAGATACTTCCATCTAGCACTGCC TTAGGATCTTAAGGATCGACTATTACTTAACGTAGGATCACGCCATGGGACACACA |
| 36418 | AGTGAACCTGTAATATAGTAAGATCCTACAGGTCTGTAGGAAATTGCTACTGAAAG TCAAGATCACTCATTAAGTCCATCTCATAGTGTGATTGAGTCCAGTGGAAATTGCT ATATTGCGAGAACTGTCTTGATAAATAGTGAACAGATACTTCCATCTAGCACTGC CAGCTTAGGATCTTAAGGATCGACTATTACTTAACGTAGGATCACGCCATGGGACACA |

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| | CACATCACCTATTGAATTCCAGGTCTTAGCAGTTATTAGAAGTGTAAACAATGCTTCCA [C, T] TCAAAAAAAGTCACACTCATCCAATTGTTAACGACGATTTATCTTTTCTTCATTCAGGC TAGTGCACTGATTCTCAGCTGGGAGTGATTTGCCCTTCCTGGGGACATGTG GCAATGTCTGGAGACACTTTAACGTGTCACAACACTAGGACTGGAGAACTACTATTGACAT TTAGGTAAAAGCAATGGATGTGCTAACCATCTGTAATGCACAGAACAAACCCCTACAAC AAATAATTATCTGGGCTAAAATGTCAATAATGCTGAGGTTAAGAAACCTCATTCTATT 36743 |
| | GTAAAGACGATTATCTTTTCTTCATTCAGCCTAGTGCACTGATTCTCAGCTGGGA GTGATTTGCCCTTCCCTCAGCTGGGAGACATGTGCAATGTCTGGAGACACTTTAAC TGTACAACACTCAGGACTGGAGAACTACTATTGACATTAGTAAAGCAATGGATGTGCT AACCATCCTGTAATGCACAGAACAAACCCCTACAACAAATTATCTGGCTAAAATGT CAATAATGCTGAGGTTAAGAAACCTCATTCTATTGTTACTCATTAACATCCCCCTC [A, G] AAACATCTCATGACCCCATAAAATATATACCTACTATGACCAACAAATTAAAATAA AAAGAGTATAAAATTAAAAAAACACCTAGTCTAGTCTTTTGGCCAAGTGC TGGCACTGGTCCCTCTGCTATTCAATTGTTGGAACCTGGATGGGACTCAGAGTGT TCCTTGTTCAGAATCAACTCAGCTGGCTACTCTTAGTGGGAGGCAAACCTGGGAGA TAAGGGTCATCTCAATTCTCCTTCTTAAGCACTAGTGGTAGCCCTGAGCTGGAAT 36958 |
| | CAAATAATTATCTGGCTAAAATGTCAATAATGCTGAGGTTAAGAAACCTCATTCTATT TTTGTAECTATTAACATATCCCCCTCAAACATCTCATGACCCCATAAAATATATACCT ACTATGACCAACAAATTAAAATAAAAGAGTATAAAATTAAAAAAACACCTA GTCTAGTTCTTTTGGCCAAGTGCTGGCACTGGTCCCTCTGCTATTCTATTGTTG GAACCTGGATGGGACTCAGAGTGTCTGTTGAGAATCAACTCAGCTGGCTTACTC [T, C] TAGTGGGAAGGCAAACCTGGGAGATAAGGGTCATCTCAATTCTCCTTCTTAAGCAC TAGTGGTAGCCCTGAGCTGGAAATACAAACACAACCCTCTGGTACTACTATAAG AACCTGGCTGGACTCTCAAGATAGTTCCCTCTGTTGGTGGAAAC AACCTCACTCAGTAGTTGGAGAGTCTCTGTTGAGTATAACACTGGCACTTGATTGCG CAACTTGTATCTGATCATGGTATATAATAATCAGGATGAAAGTCAGTTCTATT 37577 |
| | ACTCAACACTGTAAAAGAAAACACTCCTGTTGAAATTAAACAGAGTCATTCTTG TGAAAAGGCTCTGGTTGCCTAGGGTCTAGATTCAAGCCTGGCTACTAAACTTGC TCATGGGCTCTGTTCTTATCTGATGTTGAAATAAATTCTGCCCTGATTACAT TAATGATGGAGAGGATCTATAAGATGGCTCTGTTGGTGGAAAC CCCCAAAGTGAACATTGGATTGGAAAACCTCTACACAATCCCAGTCATGAAATTAC [G, A] CTTAGGAATCACTGCATTATTGAGAAGTATATTATACTGCAGCATATCAGCAA AATGAGGCCAATATAGTAAAGCAAATGTATTTAAAGGACTCATATTCTAAGCTTAT ACTCTTTTTGTTCAAATACCTTTCTATTGCAATGTTGATGGTGTAGATTGCAAGAA TGTGTTGGTTGTTAAAACACTACATGAAATATCAAACATTAACAACTGTATCA GTCAGGAAATGCTTTAAATATTCTGATCTTGAAGACTGAATCCAAGGAACCTG 38464 |
| | CTAAATTCTAAGAGCCTCAGTTCTCATCTGCAAAATGAAATAGTAATACTACCCCA CAGGGTTGTTGTGACTAAGTGACCAATATAGGGAGGGCTAGATAGAGAGACTAG CACTTGGTGGGTGTCAGGGTTGTTGTTCAATTCAATTAAATTATTCAGTATCCCC AGTGTGAAATAGTGAATCTGACATGGAGGCTCTCCAAATTAAATCCAGTGGCATAT GCCTCTGATGTCATATACTTGAGAACACAATCTGAACTCCGCAATCTGAAATA [C, T] TGAAATCGAAAAATTCAAATCCCTAAAGTCTAAATTCCAAATAGCTAAATTCTGAA AAACACAATTGAAAGATTAAATTGCAATCTGAAATCTGCAAATCAAATCTGGG GAAGGGATTAGTGTTGTTGGTGTACACAGGATAGGTGCATGTTGTTACATCAT ATTAGGCAGAACTCTTATCTGTTATTGCTCTGTTGAAATTAAATTATGGTTAAGGA GATGCATATTGGAGGCTGACAAGGGGAGACATGTGGGCTTAATTAGGTGTACACTTG 38472 |
| | TAAGAGCCTCAGTTCTCATCTGCAAAATGAAATAGTAATACTACCCACAGGGTG TTGTGTAAGTGACCAATATAGGGAGGGCTAGATAGAGAGACTAGCACTTGGT GGGTGCTCAGGGTTGTTGTTCAATTAAATTATTCAGTATCCCTAGTGTGTA AATAGTGAATCTGACATGGAGGCTCTCCAAATTAAATCCAGTGCATATGCTTGT GATGCTGATCATATACTTGAGAACACAATCTGAACTCCGCAATCTGAAATACTGAAATC [C, G] CAAAATTCAAATCCCTAAAGTCTAAATTCCAAATAGCTAAATTCTGAAACACAA TTTGAAAGATTAAATTGCAATCTGAAATCTGCAAATCAAATCTGGGGAGGGAT TAGTGTTATTGTTGGTGTACACAGGATAGGTGCATGTTGTTACATCATATTAGGCA GAACCTCTTATCTGTTATTGCTCTGTTGAAATTAAATTATGGTTAAGGAGATGCATA TTGGAGGCTGACAAGGGGAGACATGTGGGCTTAATTAGGTGTACACTGACTGGATTA 38509 |
| | AGTAATACTACCCCACAGGGTTGTTGTGACTAAGTGAGCCAATATAGGGAGGGCT AGATAGAGAGACTAGCACTGGTGGGTGCTCAGGGTTGTTGTTCAATTCAATT TTCCAGTATCCCCAGTGTAAATAGTCATGACATGGAGGCTTCAATT 38509 |

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| | AATCCAGTGCCATATGCCTCGTGTGATGCTGATCATAATCTTGAGAACACAATCCTGAACCTCGCGAATCTGAATACTGAAATCGAAAATTCAAATCCCTAAAGTCTAAAATTCCAA[T, G] AGCTAAATTCCCTGAAAAACACAATTGGAAAGGATTAAATTGCAATCTTGAAATCTTGC AAATCAAATCCTGGGAAGGGATTAGTGTATTGGTTGACACAGGATAGGTGCATCG TGTTAGTTACATCATATTAGGCAACTCTTATCCTGTTATGTCTTCATTTGGAAATT ATTATGGTTAAGGAGATGCATATTGGAGCTGACAAGGGGAGACATGTGGCTTAATT TAGGTGTACACTTGACTGGATTAAAGGAATATCTAAACCTGGTAAACATTAACCTTGGT |
| 38573 | AGAGAGACTAGCACCTGGTGGGTGTCAGGGTGTGTTGTTCATTCATTAAATTATTC CAGTATCCCCTAGTGTGTAATAGTGAATCTGTGACATGGGGCTCTTCAAATTAAATC CACTGCCATATGCCCTCGTGTGATGCTGATCATAATCTTGAGAACACAATCCTGAACCTCC AACTGAAATACTGAAATCGAAAATTCAAATCCCTAAAGTCTAAAATTCCAAATAGC TAAATTCCCTGAAAACACAATTGGAAAGTAAATTGCAATCTTGAAATCTTGC [T, C] CAAATCCCTGGGAAGGGATTAGTGTATTGGTTGACACAGGATAGGTGCATCGTGT AGTACATCATATTAGGCAACTCTTATCCTGTTATGTCTTCATTTGGAAATTAAATT TGTTAGGAGATGCATATTGGAGCTGACAAGGGGAGACATGTGGCTTAATTGG TGTACACTTGACTGGATTAAAGGAATATCTAAACCTGGTAAACATTAACCTTGGTGT CTGTGAGTGTGTTCCAGAGGAGTGTGTGACCTAAGTGGATTAGGC GGGAAGATCTGCCCTCAGTGTGGCAGGCACCCCTCAATCAGCAGAGGGCACAGGAAGAACAA |
| 38624 | AATTATTCAGTATCCCCTAGTGTGAAATAGTGAATCTGTGACATGGGGCTCTTCCA AATTAAATCCAGTGCATATGCCCTCGTGTGATGCTGATCATAATCTTGAGAACACAATCCT GAACCTCGCAATCTGAAATCTGAAATTCAAATCCCTAAAGTCTAAAATT TCCAATAGCTAAATTCCCTGAAAACACAATTGGAAAGTAAATTGCAATCTTGAAA TCTTGCAATCAAATCCCTGGGAAGGGATTAGTGTATTGGTTGACACAGGATAGGT [G, A] CATCGTGTAGTTACATCATATTAGGCAACTCTTATCCTGTTATGTCTTCATTGGA AATTAAATTGGTTAAGGAGATGCATATTGGAGCTGACAAGGGGAGACATGTGGCTT AATTAGGTGTACACTTGACTGGATTAAAGGAATATCTAAACCTGGTAAACATTA TGTTAGTGTCTGTGAGTGTGTTCCAGAGGAGTGTGTGACCTAAGTGGATTAGGC AGATCTGCCCTCAGTGTGGCAGGCACCCCTCAATCAGCAGAGGGCACAGGAAGAACAA |
| 38802 | TTTCCAATAGCTAAATTCCCTGAAAACACAATTGGAAAGTAAATTGCAATCTTG AATCTGCAAATCAAATCCCTGGGAAGGGATTAGTGTATTGGTTGACACAGGATAG GTGATCGTGTAGTTACATCATATTAGGCAACTCTTATCCTGTTATGTCTTCATT GGAAATTAAATTGGTTAAGGAGATGCATATTGGAGCTGACAAGGGGAGACATGTGG CTTAATTAGGTGTACACTTGACTGGATTAAAGGAATATCTAAACCTGGTAAACATTA [C, T] TTTGGTGTCTGTGAGTGTGTTCCAGAGGAGTGTGTGACCTAAGTGGATTAGGC GAAGATCTGCCCTCAGTGTGGCAGGCACCCCTCAATCAGCAGAGGGCACAGGAAGAAC AATACAGAAGTCAAATTGCTCTGGCAGCTGGCTGGCTTTCTTACTGCACTGG CATCAGAAATATTCCAAAAGTGTAGTTCAATGTTCACTTCTCCATAAGCATCATG TGTGTACATGAAAACATGGAAACTCCCTTAATAAAATGTAGAGATGTCTTTGTATACT |
| 38842 | ATTAAAATTGCAAATCTGAAATCTGCAAATCAAATCCCTGGGAAGGGATTAGTGTATT TTTGGTTGTACACAGGATAGGTGCATCGTGTAGTTACATCATATTAGGCAACTCTTA TCCTGTTATTGTCTTCATTGGAAATTAAATTGGTTAAGGAGATGCATATTGGAGCTG ACAAGGGGAGACATGTGGCTTAATTAGGTGTACACTTGACTGGATTAGGAATATC TAAAACCTGGTAAAACATTACTTTGGTGTCTGTGAGTGTGTTCCAGAGGAGTGT [G, A] ACCTAAGTGGATTAGCGGGGAAGATCTGCCCTCAGTGGTGGCAGGCACCCCTCAATCAG CAGAGGGCAGGAAGAACAAATACAGAAGTCAAATTGGCTCTCTGGCAGCTGGCTGG TTTCTCTACTGCACTGGACATCAGAAATTCCAAAAGTGTAGTTCAATGTTCA CTTCTCCATAAGCATCATGTGTGACATGAAAACATGGAAACTCCCTAATAAATGTAG AGATGTCTTTGTATATCTCGTGTGAAATGGAACATTCTTGAGATCTCAGTTCTG |
| 39029 | GCAGACATGTGGCTTAATTAGGTGTACACTGACTGGATTAAAGGAATATCTAAAC TGTTAAACATTACTTTGGTGTGTCATGAGTGTGTTCCAGAGGAGTGTGTGACCTAA GTGGATTAGCGGGGAAGATCTGCCCTCAGTGGTGGCAGGCACCCCTCAATCAGCAGAGG GCACAGGAAGAACAAATACAGAAGTCAAATTGGCTCTCTGGCAGCTGGCTGGCTTTCT TCTACTGCACTGGACATCAGAAATTCCAAAAGTGTAGTTCAATGTTCACTTCT [C, G] CATAAGCATCATGTGTACATGAAAACATGGAAACTCCCTAATAATGTAGAGATGTC TTTTGTATATCTCGTGTGAAATGGAACATTCTTGAGATCTCAGTCTGTGAGCAA TTGCAAGTGTGGTGTGACCCATTGCACTTGTGATCAATTCTGTCAAAGATTAGGTT GTCCATCATGTATTTCAGATGATTGCACTGAGTAAAGCTTAGTGCACACAATTACCAACCA TAGTTATACATTGTAAATTACTTTGACTTGTGAGTACAGTTCTGAGATCTCAGTTCTG |
| 39040 | GGCTTAATTAGGTGTACACTGACTGGATTAAAGGAATATCTAAACCTGGTAAACAT TACTTTGGTGTCTGTGAGTGTGTTCCAGAGGAGTGTGTGACCTAAGTGGATTAGGC |

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| 39179 | GGGGAAAGATCTGCCCTCAGTGGCAGGCACCCCTCAATCAGCAGAGGGCACAGGAAGA ACAAATACAGAACGTTAAATTGGTCTCTGGCAGCTGGCTGGCTTTCTTCACTGCACT GGACATCAGAAATATTCCAAAAGTGAGTTCACATGTTACTTCTCCATAAGCATC [A, G] TCTGTGTACATGAAAACATGGAAAATTCTCTTAATAATGTTAGAGATGTTTTGTATAT CTTCGTTGGTGAATGGAACATTCTGAGATCTCAGTCTGTGACCAATTGCACTGTG GTGATGACCCATTGAGTTCTGAGTCATAATTGCAAAAGATTAGTTGTGTCATCATGT ATTTCAGATGATTGAGTAGTAAAGCTTAGTGACACAAATTACCAACCATAAGTTATAC ATTGTAAATTACTTTGACTTACTTTATGAGTACAGTTAGTGACACAAATTGACATCTT TGGTGGCAGGCACCCCTCAATCAGCAGAGGGCACAGGAAGAACAAATACAGAACGTT TGGTCTCTGGCAGCTGGCTGGCTTTCTTCACTGCACTGGACATCAGAACAAATTCTCA AAAAGTGAGTGTACATGTTACATTCTCCATAAGCATCATGTGTACATGAAAACA TGGAAAATTCTCTTAATAATGTTAGAGATGTTTTGTATATCTCGTGGTGAATGG ACATTCTTGAGATCTCAGTCTGTGAGCAATTGCAAGTGTGGTGATGACCCATTGCA [T, C] CTTGATCAATTCTGCAAAAGATTAGTTAGGTTGTCATCATGTATTTCAGATGATTGCA GTAAGCTTAGTGCACACAATTACCAACCATAGTTATATACATTGTAATTACTTTACTTT TGACTTATTACTTTATGAGTACAGTTAGTGCACATCTTGTGTAACCATGAAACTGCCATT AGTACACCTGAGTTATGCTTGCGAAAATGTGTATGTTATTATGAAATT TTGTATAGTGGACTATGTTGCTTGCATTTTCTCAAAACATATAGACA |
| 39424 | TCTTGAGATCTCAGTCTGTGAGCAATTGCAAGTGTGGTGATGACCCATTGCACTTCTG ATCAATTCTGCAAAAGATTAGTTAGGTTGTCATCATGTATTTCAGATGATTGCACTGTAA AGCTTAGTGCACACAATTACCAACCATAGTTATATACATTGTAATTACTTTACTTTTGAC TTATTACTTTATGAGTACAGTTAGTGCACATCTTGTGTAACCATGAAACTGCCATT AGTACACCTGAGTTATGCTTGCGAAAATGTGTATGTTATTATGAAATT [A, G] TAGAGTGGACTATGTTGCTTGCATTTTTATTCTCAAACATATAGACATT TTATGTTCTCAAATAAAAGAAACATTGCCCTTAAATGTAATAATGTTTAA TTTCTTTTATTATTTTCCAGAATATGTTTGGGTTTGATCTTGTAGATT ACATTGGGATTATGTTGCTTGGGATTGTTGCTTCAAGGATTAGCCA TCTCTGCCCTGAAACATCTGCAACCCACTATTCTAGTCCTCACTTTAAGGGTACAGGG |
| 39459 | TGGTGATGACCCATTGCACTTGTGATCAATTCTGCAAAAGATTAGGTTGCCATT GTATTTCAGATGATTGCACTGTAAAGCTTAGTGCACACAATTACCAACCATAGTTAT ACATTGTAATTCTTACTTTGACTTATTACTTATGAGTACAGTTAGTGCACAT TTGTTGTAACCATGAAACTGCCATTAGTACACCTGAGTTGTTATGCTTGCGAAAATGTG ATGTTATTATTGAAATTATTGTTAGTGTAGTGACTATGTTGCTTGCATT [T, G] TTTCTCAAACATATAGACATTATTGTTCTCAAATAAAAGAAACATTGCCCTT AAAATGTAATAATGCTTTAAATTCTTTATTATTTCTCAGAATATGTTT GGGTTTGTATTTGAGATTCAACATTGGGATTATGGTTGGGATTGTT CAGGATTATGACCAACCCATTCTCTGCCTCTGAACATCTGCAACCCACTATTCT AGTCCTCACTTTAAGGGTACAGGGCTCAGAGGACTAAACTGAGGTTCTCAAGCTTTATG |
| 39594 | ACTTTTGACTTATTACTTTAGTGTACAGTCATTGCACTCTTGTGTAACCAT AACTGCCATTAGTACACCTGAGTTGTTATGCTTGCGAAAATGTGTATGTTATT ATTTTATTGTTAGTGTGACTATGTTGCTTCTGCAATTCTCTCAGGATT TAGACATTATTGTTCTCAAATAAAAGAAACATTGCCCTTAAATGTAATAAA TGTCTTTAAATTCTTTATTATTTCTCAGAATATGTTTGGGTTTGATCTT [C, T] TGAGATTCTAACATTGGGATTATGGTTGGGATTGTTGCTTCAAGGATTAGCCA ACCCATTCTCTGCCCTGAAACATCTGCAACCCACTATTCTAGTCTCACTTTAA GGGTACAGGCTCAGAGGACTAAACTGAGGTTCTCAAGCTTTATGTCATCAGACTCACC TGGAAAACCTGTTAAACACAGCTTCAAGGCCACCCCCAGAATTCTGATTGGGAGGT CTGGTGTGAGGACAAGAATTACATTCTACCAAGTCCAGGTGATGCTGCTGG |
| 40279 | TGTGGCAGTTCCCACATTCTCAAACATTGCTTCTCATCCAGTGTCTCTCTCATG TAGACATCACATTCCATCAGAAAATAAGGCATTCTCTTATGCTTCTCTCTCATG CCACGTTCTCTGCTTCTCAGGATCTGCTCACTGGCCCTGCCAGTGTCACTG CTGACATCACTGCCCTACTGCTTGAATCATGCCCTCCCTTAATGTCATGTC TTGCTAGGTTGTTACAGAGTAGATATAACAAAGAATGAATGAGTCTCC [A, G] ACCTCAAGAACATTGTTAGTGTGTTCTGACTGGAACAATGGAATATGCCCTTTGCTG CAAACAGAACATTAGCAGGTTCTCACTAGGGTCACTGTTGCTTATTTATGTT ATAAGAGCTGTTGTTAGTGTACTTAGCTGCTTATTCTAGTCACCTCTGCTCACA AGGCTACTGTCAGGTTCCAGGGGTGAGTTACTGTCATTATGTCAGACAGGGCT GTGCCCTGAGGAATATCTTCCCAATTGCCAGTCTGTAGAGGGGCCAGGGAGGT |
| 40666 | TCTCACTAGGGTCACTGTTGCCATTGTTATGTTAAATAAGAGCTGTTGATTGACT CAAACAGAACATTAGCAGGTTCTCACTAGGGTCACTGTTGCTTATTTATGTT ATAAGAGCTGTTGTTAGTGTACTTAGCTGCTTATTCTAGTCACCTCTGCTCACA AGGCTACTGTCAGGTTCCAGGGGTGAGTTACTGTCATTATGTCAGACAGGGCT GTGCCCTGAGGAATATCTTCCCAATTGCCAGTCTGTAGAGGGGCCAGGGAGGT |

GTCTTTATTCTAGTCACTTCTGCTTCACAATAAGAGGCATCTGTGCTGCGTCCAGGG
 GGTGAGTTACTGTCTTATATTGCTGACAGGGCTGCCCTGAGGAATATCTTCCCCAA
 TGCCAGTTCTGTAGAGGGCCAGGAGGTCAAGAACATAAGCTAACAAATGATTATCTTCA
 TCAGCAGAATTACCAGAGGACCTCAGACTCCTGGGTTCCCTTAAGGGACTCAGGTCA
 [G, C]
 ATCTTGCCCCAGAACACACTGTAACCTCTGAGTTAGATGAGGCACCTGTCA
 ATTCTCATGGGACCTCAACCCAGTCTCAAATACTGGTCAAAGGTGAGTTGAAACTAA
 AACAGTACCAAGCCCCCTGGACAGTATAAGTTGCTCATCACATCGAAGTATTATGATGA
 GCATCATAAAATCTCTGAGACTGGTTTGATGAACAGATAAGGAAGAACCAACACC
 CTAAAAGTTAGGGCAATTCAAGTCCAGATGAGAAGAACGTGCAGGATTGAGACTTGG

 40723 GCTGTCTTATTCTAGTCACTTCTGCTTCACAATAAGAGGCATCTGTGCTGCGTCCA
 GGGGTGAGTTACTGTCTTATATTGCTGACAGGGCTGCCCTGAGGAATATCTTCCC
 CAATGCCAGTTCTGTAGAGGGCCAGGAGGTCAAGAACATAAGCTAACAAATGATTATCT
 TTCTCAGCAGAATTACCAGAGGACCTCAGACTCCTGGGTTCCCTTAAGGGACTCAGGT
 TCAGATCTTGCCCCAGAACACACTGTAACCTCTGAGTTAGGTTAGATGAGGCACCT
 [G, C]
 TCAATTCCATGGACCTCAACCCAGTCTCAAATACTGGTCAAAGGTGAGTTGAAACT
 TAAAACAGTACCAAGCCCCCTGGACAGTATAAGTTGCTCATCACATCGAAGTATTATGATGA
 TGAGCATCATAAAATCTCTGAGAGTTGTTTGATGAACAGATAAGGAAGAACCAAC
 ACCCTAAAAGTTAGGGCAATTCAAGTCCAGATGAGAAGAACGTGCAGGATTGAGACT
 TGGAATCCCAAAGAGGCACTTAGTAATGGTTAAAACCTCTGAGGGTTATTGTAACGT

 41090 AGTACCAAGCCCCCTGGACAGTATAAGTTGGTCATCACATCGAAGTATTATGATGAGCA
 TCATAAAATCTCTGAGAGTTGGTTTGATGAACAGATAAGGAAGAACACACCCCTA
 AAAGTTGAGGGCAATTCAAGTCAGATGAGAAGAACGTGCAGGATTGAGACTTGGAAAT
 CCCAAAGAGGCACCTTAGTAACTGGTATAAAACTCTGAGGGTTATTGTAACTGATGCC
 CCTGGGGTAAATGGATATCTGAGGCTTGGCAGAACAGTTGCAAACACTCCCCAACCTT
 [C, T]
 TGCTTTCTTGAGGGTGTGTTGTATGAAAAGAGCAGTTCTGGAATTCAACAAATAA
 AATGAGCCCTCTCATTTCAAGGCCCTCTGCTGGGTAATCTGGGCAATATGCTTCCCCT
 CTGAGCCTTATTACCCCTGTTCCCTCATTTCAAGCAGATCTAACCTCCGATCTGCTC
 TGTGGTGGCCTACTGGATATTCTGAAGCTCAAGTCTGCTGCTAATAATAATA
 ACCAATTACTATAGCAACAGCAACACTCTAAGTGTGAGCACTTGTGCTGTGCCAGCTC

 41260 GACTTGGAAATCCAAAGAGGCACCTAGTAATGGTTAAAACCTCTGAGGGTTATTGTAAC
 TGATGCCCTGGCCTGGGTAATGGATATCTGAGGCTTGGGAGAACAGTTGCAAACACT
 CCCCAACCTTCTGCTTTCTGGAGGTGATGTTGTATGAAAAGAGCAGTTCTGGAAAT
 TCACACAATAAAATGAGGCCCTCATTTCAGGCCCTCTGCTGGGTAATCTGGGCAATAT
 GCTTCCCCTCTGAGCCTTATTACCCCTGTTCCCTCATTTCAAGCAGATTCTAACCTC
 [C, T]
 GATCTGCTCTGTTGGGCCCTACTGGGATATTCTGAAGCTCAAGTCTGCTGCTGCTAA
 TAATAATAACCAATTACTATAGCAACAGAACACTCTAACGTGAGCAGTTGCTG
 TGCCAGCTCTGGATGGTCTCATGTGTTCCATCAGCCGTTCTTACAGAAGTTGGT
 AGGTAGTTACTATCATTACCCATCCCATAGGCAAAAAAACTCAGCCACAGAAAGGTTA
 AATAGCTTGCTCAGGTACATAGCTAATAGTGGTAGACTGTAAGTGGACTTGGAAACCCAGCACT

 41421 AAGAGCAGTTCTGGAATTCAACACAATAAAATGAGGCCCTCTCATTTCAAGGCCCTCTGCT
 GGGTAACTCTGGCAATATGCTCCCCCTCTGAGCCTTATTACCCCTGTTCCCTCATTT
 CGAAGCAGATTCTAACCTCCGATCTGCTCTGTTGGGCCCTACTGGGATATTCTGAAGC
 TCAAGTCTGCTGCTGCTAATAATAATAACCAATTACTATAGCAACAGAACACTCT
 AACGTGAGCACTGTGCTGCCAGCTCTGGGATGGCTCATGTGTTCCATCAGCCC
 [A, G]
 TTCTTACAGAAGTCTGGTAGGTACTATCATTACCCATCCCATAGGCAAAAAAA
 CTCAGCCACAGAAAGTTAAATAGCTGCTCAGGTACATAGCTAATAGTGGTAGAGTC
 TGTACTGGAACCCAGCACTGCTCTGCAATTAACTGCTATGGTACACTGCTCTGAGATGT
 TAAAATTACTTTGGTGAACCTTAAGTAACTATCAATGGAGATGATTCTTGCATGC
 GACAGTTGCTCTCAAGCTTAAGCGGATACCAAGGAGTCTAACCTCTGGCCCTGA

 42640 ACAGGGACAGAGAGGGATGGTGAAGAAGAGATACTGAGCTAACATGAGATGAGAATGGTAAGT
 GAGAGTTGGCTGTGGATAATAGTGGGAAAAAATATTCTAGGGCAGAGGGAACTTCAAGTA
 CAAAAGTTTTAGGTGGTCAAGTGTAGGTTCAAGTAACTAGAAGGGAGCCACAT
 GGGGTTGGAGGTGGTGGCTAGGCCCTAGGGTAGGTAGTCTAGGGAGAGGTGGTCTAGGGTCA
 GTCAAGGGACAAATGATGCAGGGCCTCTAGACCATGGGCCCTCTGGGATCTTCTCTT
 [C, G]
 AGCCCTCTACGGGCCAGCCAACCAAGGCAGGAACCTGCTCTGTGTATTCTCATATCT
 CTGAAGTCCAACCCAAACCTCTCAAGGCCAACGTCTGTCTTCTTCTAAATATC
 CTCACCCAAATCTTACACAGTTCTGACACATAGCAGATTCTCAGGATAGCTGATGACT
 TCAAGGTATAAGTTAGGAAGATATTGCAAGACACAGATAATTATTTATAACCAAGG
 AAGAGCTTATTTAGCAAAAGTCTGCACTCCTCAGTAGGTACTAACGCTCCCTGTACT

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|-------|---|
| 42650 | AGAGGGATGGTTGAAGAAGAGATACTGAGCTAACAGATGAGAACATGGTAAGTGAGAGTTGGC TGTGGGATAATAGGGGGAAAATATTCTAGGCAGAGGGAACTTCAGTACAAAAGTTT TAGGTGGTACAAGTTGAGATGGTCAGTAATAGAAAGGAAGGCCACATGGGGTTGG AGGTGGTGGCCCTAGAGGTAGAGTGCCTAGGAGAGGTGGTTAGGGTCAGTCAGGGACA AATGATGCAGGGCCTCTAGACCATGGGCCTCCCTGGGATCTTCAGCCCTCTA [C, G] GGGCCCAGCCAACCAAGCCAGGAACCTGCCTCTGTGATTACATCATATCTCTGAAGTCCA ACCCCCAACCTCTCAAGGCCAGTCAGTGTCTTTCTTAAATATCTCACCCAAA TCTTACACAGTTCTGACACATAGCAGATTCTCAGGATAGCCTGATGACTCAAGGTATA AGTTAAGGAAGATATTGAGACACAGATATTTTATTTATAACCAAGGAAGAGCTTAT ATTTAGCAAAAGTCTGCACTTCAGTAGGTACTAACGTCCTGTTACTAGAGGTACAT |
| 43285 | ATTGAATAGAGGTAGTAGTCATGGTGTGTTGCAATAGAGATAGCAGTAGTGGTCACAATG ATAAAAATAGTAATTCCTATGTATTAAACAGTCATATGCCAGACCTAGATGTAT ATTATCTCATTAAGCTTCTAAACACCTCATAAAGGAATACCATTATTATTCACCT TCCAGTCACAGAGACTGAAACCTCTCACATTAAAGGACTGTCACCTGGGTAGGTAGT GAGTAAGTGGTAGGGTCCACTTGTAAAACCCATACTTCCAGTCCATACTGAAAACCCCT [C, T] TAGGGAAACTTAATGATTGGACTCCATATTGACTTCATGTATCTGGCTTTTATTTC TATCCAGAGCTTATTGCAGGGTGTAGGGGGTCACTCTTACAGCCTTACAGCCCT TTTACATATATTAGTAATAATAGAATTGAAATTCTAAATAGCTGAAAGTATGTTTT TCCTCCAGCAAACATTCCTCCAAAGATCATCCCAAACACTGATGAGTATCTGTTCTGT GAGCATTACTGTACTGATCTTCTCCGTCACTGACTTTGTTATTGAGTCATTCA |
| 44406 | AATTGTGTGACCTTGAGCAAGCCCTTACTTCATCTAGCTAACAAAAATAAAATA AATAAAACAGTCACCTCTGCATAGGTGTATGCCAGGACTGACTCAAGGAATTTTAAGA ACACTTAGCCAGACCTAGAAAGATTCTAGTAAGGTTAGTAATGTTAATTATGGTTG TTAGTAAACATCATCAAATTAAAATATTACACTGACTTTGTGAATCTAGACTT GCTAGCTCTGGTGTGCATCCAATGATACAAACCCCATATTCAACATTCTCTTGAAG [A, G] TTTCACAGAAATGTTGCTGAGCTGACCTTAAAGATACCTTGCGACTCCAAAGTTCTGTGA CTTTCACCAGGAGCTCAAGGCAAATGCACAGAAGGGTCAGGCAAGTATCGTGAATGGAG GCTGGACCAGGGAGCCATGCATTCTCAAAGGCATTCAATTCACTGTTAAAGCA CTGAGTTGCACAAAGAAACGTCACTGTTGGCCAGCCTCGGTTCTCGGCTAGCTCCTC AACCAAAGTGTATCATCTAGGATGGAGGAGGCTCTGAGGGACTGAGGGAGGACAAATCT |
| 44585 | GTTAGAACATCATCAAATTAAAATATTACACTGACTTTGTGAATCTAGACT TGCTAGCTCTGGTGTGCATCCAATGATACAAACCCCATATTCAACATTCTCTTGAAG GGTTTCACAGAAATGTTGCTGAGCTGACCTTAAAGATACCTTGCGACTCCAAAGTTCTGT GACTTTCACCAGGAGCTCAAGGCAAATGCACAGAAGGGTCAGGCAAGTATCGTGAATGG AGGCTGGACCAGGGAGCCATGCATTCTCAAAGGCATTCAATTCACTGTTAAAG [C, T] ACTGAGTTGCACAAAGAAACGTCACTGTTGGCCAGCCTCGGTTCTCGGCTAGCTCCTT CAACCCAACTGTATCATCTAGGATGGAGGAGCTCTGAGGGACTGAGGGAGGACAAATC TTGAAAGAGAGGTACAAGGAAGAGATGGGATTGGATAAGGCAAGGAAGGCCAGGAGG CTTGGATGAACTGACCTCTAGATACTTCAATTGATAAGGCAAAAGTCCATTCCCAC TTAAACCCCTCACCTCTCAAGAAACTGTCTCAGCTTCAGAGGCCATGGCT [A, G] TGAACTGACCTCTAGATACTTCATTGCAAAAGTCATTCCACTCTTAAAC CCCTCACCTCTCAAGAAACTGTCTCAGGTTGGCCAGCCTCGGTTCTCGGCTAGCTCCTCAACCC AAGTGTATCATCTAGGATGGAGGAGGCTCTGAGGGACTGAGGGAGGACAAATCTGGAA AGAGAGGTACAAGGAAGAGATGGGATTGGATAAGGCAAGGAAGGCCAGGAGGCTTGG [A, G] TGAACTGACCTCTAGATACTTCATTGCAAAAGTCATTCCACTCTTAAAC CCCTCACCTCTCAAGAAACTGTCTCAGGTTGGCCAGCCTCGGTTCTCGGCTAGCTCCTCAACCC AATTTGTAAGAGGTGATGGAAGCATCAGGTTCTCAGGCTGGTAATTGTTATT ATTCTCCATTGACACAGTTAACCTTGTCTTGGCACTGAGCATATTGCTCAAATAAA GTGAAGAGAAGGGTGTGGGGAGAAGGCAAGAGATAATTGGCTAGAAGGTTATGAGAATC |
| 44772 | ACCAGGAGCTCAAGGCAAATGCACAGAAGGGTCAGGCAAGTATCGTGAATGGAGCTGG ACCAGGGAGCCATGCATTCTCAAAGGCAATTCAATTCACTGCTTAAAGCACTGAG TTGCACAAAGAAACGTCACTGTTGGCCAGCCTCGGTTCTCGGCTAGCTCCTCAACCC AAGTGTATCATCTAGGATGGAGGAGGCTCTGAGGGACTGAGGGAGGACAAATCTGGAA AGAGAGGTACAAGGAAGAGATGGGATTGGATAAGGCAAGGAAGGCCAGGAGGCTTGG [A, G] TGAACTGACCTCTAGATACTTCATTGCAAAAGTCATTCCACTCTTAAAC CCCTCACCTCTCAAGAAACTGTCTCAGGTTGGCCAGCCTCGGTTCTCGGCTAGCTCCTCAACCC AATTTGTAAGAGGTGATGGAAGCATCAGGTTCTCAGGCTGGTAATTGTTATT ATTCTCCATTGACACAGTTAACCTTGTCTTGGCACTGAGCATATTGCTCAAATAAA GTGAAGAGAAGGGTGTGGGGAGAAGGCAAGAGATAATTGGCTAGAAGGTTATGAGAATC |
| 45507 | ATAACTCACCCATGGTCACCTATGTGAAAAAGTGCAGAGCTAACAGAACATTGAAATC TGTCAAACCTCCAGAGTGTAGAGACTGCCAACAGACCCCCACTTCAGGCCAACATGCAT TTCCGCACCTGATTGTCAGGAGCTCTCAGGGTTTGGGCTATGCTGGTCTTG CTATGCTGCCCTCGGAAATGTCAACCTAACCTAGAAATAGTGTATTCTGTTACAAAGCAA GTTGAAGAAAAGAAAACACTCCTTTCTGCTCTCCTCTACTTCC [C, T] CTGAAACTTAAGTCCAAGGAGTGCAATTAGCAGGTCAAGCTGTCTTGCTGAACAGTCAG GTTACTTCCCTCAGTATTGATGCCAGTGAAATGTTGAGCTGAAAGGCTGGCTGATAAAA TGCCCTCTGGGAGAAGGAACGTGAAATAGCCTGGATCTATTGGCAGATACTAGGGCC AAAAGTCCTAGAAACTCAACCTGAAAAAAATGTCTAGGAAAGCAAACGCCAACTA AGGTAGTAAACACTTCAGGAAACCTTGATAATAGCAATTGGAAAATCTGATGTACAG |

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| 46883 | GTAATTAGAATGTCAAACACGTACAGACTAATGCTATTACCCACCATCCACCAACAT TGTTTATCCAGTTGTTATTCAATTGCAAATGGCTTCTAGCCTGGAGAAATGATCT GAGGGGGTCAGAGCTATGGCCATATCTGCAAATAAAGCAACCTCTGGCACATATGAT AGGCCAAAACCCTATCACTGGGATTGTGAACAACATTCTCCAGTCAGTGAAACAAGCA GGTGCAGAAAAGAGTGTAAATAATTCAACTTGTGTTAGGTGAGTAA [C, T] GTGAATGTGAACAGTTTATCTTTATTCTGGTCTCAAGTTGGCAGTTAGGCATC CATTCCTAACATAAAATAGTGTCTATGAATGGCAGCTGGTCATTAGATGTACATATCCAA ATCCAAGATCAGTACAATTTCACCTCCACCTTGTCTTACCTCTGCACCTCCAACTCA GTGGCAGTGCACATCCACCTAATCACCCAGAAAGAGACCAAGAGACTTTGATTCTT TTCCTTATCCATGTCTTGATCTGCCACCAAGTTGGAGCTGTTACCTCTACTGTCTC |
| 47855 | CTTCTTCATCCCTGTCCTCTCAAGACTTTAATCGTCCTCAGGGCCAAGTTAGAT CTAACCCCTACCAATAAGCTTCCCTCAATCTCCCACCCCTACCTCCACAAAGAATTAGCCT TCCCCATTATATCCCTTATCATCTGCCGTACATTAGCAAGATTGTATGCATGACTGT TAGACTGACAGCTCCTTGGGGAAAGGCCCTCTTGTGCTCATCTGCCATCTCCTT CTCTCTCTCCCTTGCTCCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT [G, T] ACATTTCACATAAGAGACACCCAGCAAAGTGTGTTGAATAGAATCCATTAATTGCATT CCATTCTTGGAAATAGCTTGGGATCCATTGGCAGATACTGAAAATTCAACTAAC ATGATGGTGGAGAAAACCTTAACCTTTGTGCTCATGTTAAATTAGAAACATTGTT CATTCTATCACCTGCTAACCTCTTAACTACTTGAGGTTATGGAGAAAGGGCAGAAGA CTTATTCTTCTACTCTTAAATTCCGGCAATTCTCTTCTCATCAGTATTGCCA [G, T] TTTAAATCGTCCTCAGGGCCAAGTTAGATCTAACCCCTACCAATAAGCTTCCCTCAATC TCCACCCCTACCTCCACAAGAATTAGCCTTCCCCATTATATCCCTTATCATCTGCCG TACATTAGCAAGATTGTATGCATGACTGTTAGACTGACAGCTCCCTTGGGGAAAGGG CCTCTTGTGCTCATCTGCCATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT AACCTCTCCAGCCAGCATCTAGTCAGTACATTCTACATAAGAGACACCCAGCAA [C, G] TGTGTTGAATAGAATCCATTAATTGCATTCCATTGGAAATAGCTTTGGGATCC ATTGGGAGATACTGAAAATTCAACTAACATGATGGTGGAGAAAACCTTAACCTTGT GCTCATGTTAAATTAGAAACATTGTTCTTCTATCACCTCTGCTAACCTCT AACTGAGGTTATGGAGAAAGGGCAGAAGACTTATTCTACTCTTAAATTCTCGG TCAATTCTCTCTCCATCAGTATTGCCAGTGCCTCGTTGAGACAGGTATCTTGTG |
| 47885 | AATCTCCCACCCCTACCTCCACAAGAATTAGCCTTCCCCATTATATCCCTTATCATCT GCCGTACATTAGCAAGATTGTATGCATGACTGTTAGACTGACAGCTCCCTTGGGGAA AGGCCCTTGTGCTCATCTGCCATCTCTCTCTCTCTCTCTCTCTCTCT TCCAAACCTCTCCAGCCAGCATCTAGTCAGTGCAGTACATTCAACATAAGAGACACCCAG CAAAGTGTGTTGAATAGAATCCATTAATTGCATTCCATTCTTGGAAATAGCTTTGG [A, G] ATCCATTGGGAGATACTGAAAATTCAACTAACATGATGGTGGAGAAAACCTTAACCT TTGTGCTCATGTTAAATTAGAAACATTGTTCTTCTATCACCTCTGCTAACCTCT AACTAATTGAGGTTATGGAGAAAGGGCAGAAGACTTATTCTACTCTTAAATT CCGGTCAATTCTCTCTCCATCAGTATTGCCAGTGCCTCGTTGAGACAGGTATCT TGTGTTAAAGTTGAAGTCCCTGAGATAAGACTATCTGGTTAAACTAGTTATGCT [A, G] TTTGTTCATTCTATCACCTGCTAACCTCTTAACTAACTTGAGGTTATGGAGAAAGG GCAGAGACTTATTTCTACTCTTAAATTCCGGCAATTCTCTCTCTCATCAG TATTGCGAGTGCCTCGTTGAGACAGGTATCTTGTTAAAGTTGAAGTCCCTGAG ATAAGACTATCTGGTTAAACTAGTTATGCTAACAGACAGACCTTGGTGAAGTTAGT TACTCTCTGGCCTCAGTCTCTCAACCTAAATTGAAATATTGCTACCCATT [T, A] GTAGAGAGAGATTCCACAGGCCAGTTGGGCCAGGGACCCCTGGATAATAAAAGCAA TCGGACATCTTGGGAAACCGAGTAATCTCTAACATTCAAAGATACTGCTGCTCCCT CAACGCCATACAGTGTGCGCAGTAGATTATAACTGCTAACAGGAAAGAGATGATGCTG CTCTCTCCATATCCCTGGCTCTGACACATAAGAGGATCATAAACGCACTTGCAAAGC AAATGCCAGCTGGAATTCTGCAGCAGCCTGGAGACCAGACCCCTGCACATCAAGGCCA |
| 48328 | GAAGACTTATTTCTACTCTTAAATTCCGGCAATTCTCTCTTCCATCAGTAT TGCCAGTGCCTCGCTGAGACAGGTATCTTGTTAAAGTTGAAGTCCCTGAGATA AGACTATCTGGTTAAACTAGTTATGCTAACAGACAGACCTTGGTGAAGTTAGTTAC TCTTCTGGGCTCAGTTCTCAACCATAAAATGAAATATTGCTACCCATT AGAGAGAGATTCCACAGGCCAGTTGGGCCAGGGACCCCTGGATAATAAAAGCAA [G, A] GACATCTTGGGAAACCGAGTAATCTCTAACATTCAAAGATACTGCTGCTCCCTCTCAA CGCCTACAGTGTGCGCAGTAGATTATAACTGCTAACAGGAAAGAGATGATGCTGCTC TCCCTCCATATCCCTGGCTCTGACACATAAGAGGATCATAAACGCACTTGCAAAGCAA TGCCAGCTGGAATTCTGCAGCAGCCTGGAGACCAGACCCCTGCACATCAAGGCCAGTG |
| 48391 | GAAGACTTATTTCTACTCTTAAATTCCGGCAATTCTCTCTTCCATCAGTAT TGCCAGTGCCTCGCTGAGACAGGTATCTTGTTAAAGTTGAAGTCCCTGAGATA AGACTATCTGGTTAAACTAGTTATGCTAACAGACAGACCTTGGTGAAGTTAGTTAC TCTTCTGGGCTCAGTTCTCAACCATAAAATGAAATATTGCTACCCATT AGAGAGAGATTCCACAGGCCAGTTGGGCCAGGGACCCCTGGATAATAAAAGCAA [G, A] GACATCTTGGGAAACCGAGTAATCTCTAACATTCAAAGATACTGCTGCTCCCTCTCAA CGCCTACAGTGTGCGCAGTAGATTATAACTGCTAACAGGAAAGAGATGATGCTGCTC TCCCTCCATATCCCTGGCTCTGACACATAAGAGGATCATAAACGCACTTGCAAAGCAA TGCCAGCTGGAATTCTGCAGCAGCCTGGAGACCAGACCCCTGCACATCAAGGCCAGTG |

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GAAAACATAATGATTCTCCCCCGAGACCTGCCTAGCGAAGGGCCCCGTGGAGCTGGCT

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| 48453 | CCAGTGCCTCGTGAGACAGGTCACTTTGTTAAAGTTGAAGTCCTGAGATAAG ACTATCTGGGTTTAATACTAGTTATGCTAACAGACAGACCTGGGTGAGTTAGTTACTC TTCTGGGCCTCAGTTCTAACCATAAAATGAAAATATAATGCTACCCATTGAG AGAGAGATTCCACAGGCCTAGTGGTGGCAGGGAACCTGGATAATAAGCAATCGG ACATCTGGGAACCAGGTAACTCCTAACATCCAAAGATACTGCTGTCCTCTCAAC [A, G] CCATACAGTGTGCCCAGTAGATTATAAACTGCATAAGGAAAGAGATGATGTCGCTCTC CTCCATATCCCTGGCTCTGACACATAAGGGATCATAAACGCACTTGCAAAAGCAAATG CCAGCTCTGGAAATTCTGCAGCAGCCTGGAGACCAGACCCCTGCACATCAAGGCCAGTGG AAACTAATGATTCTCCCCGAGACCTGCTAGCGAAGGGCCCCGTGGAGCTGGCTGG TGAGAGCATTCTCATTCTCCATGTCCTGGCTCTCTCTCCCCACCTCCGCA |
| 48690 | CGGACATCTGGGAACCAGGTAACTCCTAACATTCCAAAGATACTGCTGTCCTCTC AACGCCATACAGTGTGCCCAGTAGATTATAAACTGCATAAGGAAAGAGATGATGTCG TCTCTCCATATCCCTGGCTCTGACACATAAGGGATCATAAACGCACTTGCAAAAGCA AATGCCAGCTCTGGAAATTCTGCAGCAGCCTGGAGACCAGACCCCTGCACATCAAGGCCAG TGGAAAACATAATGATTCTCCCCGAGACCTGCTAGCGAAGGGCCCCGTGGAGCTTGG [T, C] TGGTGGAGAGCATTCTCATTCTCCGCATGTCCTGGCTCTCCCTCTCTCCCCACCTCC GCAGCCTCCCAGTCAGCTATTGTGCATCTCTGCTCTGTGTCGCTGCTGGGTCC CTTCTGCGCTGCTGCTAACAGATTGTGATGTCATTAGTGTGAAAGGTGATTACA GAATAAAATTGATTGTGTTTAGGTCTAGCAATCTACTCTGTAATCATGTCGAA GGGACTTCATAATAGTGTGAGGGCCTGGTGTAGCGAACACCAGGTCTCCAGTGGCTTCAG |
| 49100 | TGCTGGGTCCTCTGCGCTGCTGCCTAACAGCATTGTCGTGATGTCCTTAGTGTGAAA GGTGAATTACAGAAAATAATTGCAATTGTTAGTCCATAGCAATCTACCTCTGTAAT CATGCTGTAAGGACTTCATAATAGTGTGAGGGCCTGGTGTAGCAACCCAGGGTCTCCA GTGGCTCAAGATAAGTCTGCAACCAATGACATTCAGCCAGTGAATTGCAAG TTAGAGGTGAAGATGGAGGTGCTGCTGCTATGAAGCAACCATACTCTCACCCCTTTATC [T, C] GCAGGGTGTATAAAATCAATCAAAACATGAGATGTGGTTTTGTTGTTAATAACC ACTGGAAAACATAAGACTGTGTTATAGAGTCAGCTCAGCCAACAGCTGCTCTACCAGCC CTGTGATTAGACAAAGGAAAGTCTAACAGTGTCACTAGAAGGGGGAGGCACCAAAGAA GAAGAGGCAGGGAGGTGATAAGTGAAGGCAAGGAGGACTGGCTGGAATCTGAGAAA CCTGAGACTGATTGTTCTAACATCATCCTATGTGATGGTGGAAAGATAAGAACACAGA |
| 50598 | TGGAAATGACACTGGCTGGGTTGTGAACTAATCAAACCTCATGAAGGGTAACTAGCTGG CCAGGGCTGAGAATGATTAATTAGGTCACTGTTCTAAACACAACCCCTCTCTAT CTTCATGTTATTCATATCTGCAATTACTATTTCTTTAACAAACATATTAA ATTAAGTTATTAAGGAAACATCAACTATTGCAAAATAGAAAAACAGTATCACT ATTAATAGGTAGAAGCTATAAAATTAAACAAAGCATTGTTATTATATTCTAGCCATATG [C, A] CATTGCATTCTAGCCTCTGAGCCTGATTCTGCCTCTTTGTTAAAATAAAAGGGA AATGGCAAGGTATGGAGATAATAATTACCAAACAGATTCTTTCACTTAATAGCA GGAATAAAAGGAAATTAAAAGTAATGTCATACGCAATTGTCAGTGTGTTAATGCC ATTCTCACATTGGGAAATTCCACTCACCATACTGGTTCTAGTCTTACTGAGCAATT AATTGCTATATGCTAGCTCACCTCTGTACCTCAATTGTCATATGTAGAATGAGGT |
| 50753 | ATTTCTTTAACAAACATATTAAATTAAGTTATTTAAAAGGAAACATATCAACTAT TGCAAATAGAAAACACAGTACTATTAAATAGGTAGAAGCTATAAAATAAAACAAAGC ATTGTTATTATATTCTAGCCATATGCCATTGCTATAGCGTTCTGAGCCTGATTCTG CCTCTTTGTTAAAATAAAAGGAAATGCCAAGGTATGGAGATAATAATTACCAA CAGATTCTTTCACTTAATAGCAGGAATAAAAGGAAATTAAAATGAATGTGCAAC [A, G] CATTGTGAGTCTGTTGTTAATGCCATTCTCACATTGGGAAATTCCACTCACCACCTG GGTCTAGTCTTACTGAGCAATTAAATTGCTATATGGCTAGCTCACCTCTGTACCTC ATTTCATATGTAGAATGAGGTTGGTAGGTGAATACAGAATTCTTTAACCCCAA GTTCTCAATGTTGCTCACGGCAAGCTGCACTGAAATTCTGTGAGGTATACTTGGT GAAAATGTTAATTCTAACGCTTCAAGATAATTCTGAAAAGAATTCTGGAAATT |
| 54798 | GTGGCAATGTTGGAATGGTGACAATGTTGTAATCCCACTGGTAATATTATAATGGTGGCA GTTGGTGGTGGTGGTGATGATGATGAGATAACAAATGAGGATGATAAGAATCAACAG CTAACATTGTAAGAGACTTACTATTGTTATACAGGCTAGGTAAGTACTGCTAC TATCTAATTCTACCTTTGACTCTTTAGATATGCCAGTACTCCACATCTTCAAGT GGGTGAACGTGAGGTTTCAGAAGTTGAGTAATTCTGAGAGGCACATTAGTAAACTAA [G, C] ACAAAGTCAGAATTGATACAGGCCATATGATGTCATCATATATATGTAAGTGTCAAC TGTGGTTACTGTAATGAGGAAGGAAAGAAGGAAAGAAGGAGTGGAGGTGAGGGAGGG AATTCTGTTCTAACATCTAACGATTCTGGAAAATAGAGATAATTCTAGCATT |

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| | TATGGAAATCAAATGAGATTAAGGAGCTTGTCAAGTCAGGCTTCATAATTACTCATTCAATA |
| 55058 | <p>AGTTGAGTAATTCCTGAGAGCCTACATTAGTAACTAAGACAAAGTCAGAATTGATA CAGGCCATATGATGTCATCATATATGTAAAGTGCTCAACTGTTGGTTACTGAATGAG GAAGGAAAAGAAGGAAGAAAGAGAAGGGAGTGAGGGAGGGAGGAATTACTGTTCTAAT CTAAAGATTCCCTTCTGAAAATAGAGATAATTCTAGCATTATGAAATCAAATGAGAT TAAAAAAAGTCAAAGCTTGTAAAAGTCAAGTCCTCTATGTACGAGGGCTAAACC [A, G] TCAGAGGCAGCTTCATAATTACTCATTCAATTCAAGAGATAATTGGTTCTGTTT AGGCACCTAGAATATAGTGGGCAAAACAAACTAAAGTGCTGCCCTCAGTGAGCTTCAGT CGAGTCTAGTGACAGACAAGCAATGCCAGGTGAAATATATAGTCCTGTGGGAAAAATA AAGCATGGAGGGGTGAGGGAAATATGTGTATGTTGGGGTGGGTCACTTTAAATA GGGTGTGAGGGAAAGCCTGATAAGGTGATATCTGAGCAGGGCTGAAAAAGGTAAGC</p> |
| 55171 | <p>GAATGAGGAAGGAAAAGAAGGAAGGAGAAGGAGTGAGGGAGGGAGGAATTACTGTT TTCTAATCTTAAAGATTCTTCTGAAAATAGAGATAATTCTAGCATTATGAAATCAA ATGAGATTAAGGAAAGTCAAAGCTTTGAAAAGTCAAGTCAGTCCTCTATGTACGAGGG CTAAACCATCAGGGCAGCTTCATAATTACTCATTCAATTCAAGAGATAATTGGTT TCTGTTTAGGCAGTAAAGTGGGAAACAAACTAAAGTGCTGCCCTCAGTGAG [C, T] TTCAGTCGAGTCAGTGACAGACAAGCAATGCCAGGTGAAATATATAGTCCTGTGGGA AAAATAAAGCATGGAGGGGTGAGGGAAATATGTGTATGTTGGGGTGGGTCACTCT TTAATAGGGTGGTGAGGGAAAGGCCTGATAAGGTGATATCTGAGCAGGGCTGAAAAA GGTAAGCCAGGGAGTCACACAGAACTCTGGGAAAGTGTGTTATATCCCACAGGGAGT TAAAGTCAAATGAGGAATGATATCACTGTGATAAGAATGCTAGGAATGGGATTATGCA</p> |
| 55801 | <p>TGCAAGTCAGTCAGTCTTCTGGTAACCTCCTCTGGTGGGGTCTCTGAAGGCTCAGT CAAGGTGTGATGTCCTGGGGAGATACTATTATCTGAAAGCATGGTCCCTCTGGCAACAG GCAATGGTCTGAGGGAGATACTTCTATTCTCCATTCAACCATCATGAGCATGATGAC ACTAGGCAGGTCTGTGTCATGGCATCCCCCTCCAGCTGGGAAAGACAAAGGAA GTCAAGGGAGGTTCTCCCCACATCAAATGGAAAAGTCCTGCTCCACCAGGGTCTATAATGA [G, A] ATGTTTATTAAGTCTATAATGACCTAACGTTAAAGTTAATTACTTTATTCAAGATTAC AGACATTACCAAAATTACATAGGATTGCAACACAGGAGAAAGATAAAATAATTACCAACC AGATTGAAGAGCTTAGAGAAATAGGTAATAGTCATGGGAAAGAGATTAAATTAGATAAA CCAAAGCAGGATATCTGAAAATGCCAAGTCAGGGAAAGCGAGGAGAAAGATAGC TAGTAAGATGGAAGAGACATGGAAAGGATTGAGAACATGACGTTGTGATAGTGAGTGTG</p> |
| 56324 | <p>CCGAGAGGAAAAGATAGCTAGTAAAGATGGAAGAGACATGGAAAGGATTGAGAAAATGACG TTGGTGTAGTGAGTGGCCAGTTATGATAAGAGATGAGGGAAATGGGAAAGATATTA CTGAAAATATGGCTCTCCTGAAATCCAAAATAATGAGGTAAATTGTGGGAAAGCAG TGCCAGACTGGATCTGTGGCTTAGTCCAGTCAGGAACTGCCCTCTGCAACTTG GGAAAGCTTTGATTTTCTAACCTTAGCTTCTCTGTGTTATGACATACAATAC [A, G] GTTCTAAGTCTAAATGTTCTAGTTCTTGTGTTAAGGAAGGCGCATGTGCTCTGAG GAGACCTGAAATCCATCCCTGGCTCCTGGCTGACCTTAATAGAAACATTGAAAGATGG AGATTCTGACAAGTAGTCAAAGGAAAGGCATTCTTGGAGATGGATCAAGGGTCCA GGCTCATGGAGACACTGAAAAGTTGAAAGGTTGCAAAATTGAGGGAGAACGACAGTTA TGATAGTTCAAGTAACTGGTTTGCCAGAGGTTGAGAAAAGTTAAAGATTGATT</p> |
| 56557 | <p>CAACTGGGAAAGCTTTGATTCTAACCTTAGCTTCTCTGTGTTATGACAT ACAATACGGTTCAAGTCTAAATGTTCTAGTTCTGTGTTAAGGAAGGCCATGT GCTCTGAGGAGACCTGAAATCCATCCCTGGCTCCTGGCTGACCTTAATAGAAACATTG AAAGATGGGAGATTCTGACAAGTAGTCAAAGGAAAGGCATTCTTGGAGATGGATCA AGGGTCAGGCTCATGGAGACACTGAAAAGTTGAAAGGTTGCAAAATTGAGGGAGAAC [G, A] ACAGTTATGATAGTCAGTATAACTGGTTTGCCAGAGGTTGAGAAAAGTTAAAGA TTGATTGAAATGTTGAGGGTATGTCAGTAAAGCAGAAGGAGGGTGAGTTAAATAAGAC AATTATAGGCTGATGTCCTCAGGGACTGGGGAAAGTTGGGTATCTTAAGATGCCA TGGCAGTCTGACATACAGGAATAGTTGATCCACTGCAAACTCATACCTCTATGCATT CAGGGTCGGCTTAAGGATATTGCAAAAGAACATACTGGAGGGAGAACATCAGACTGTCC</p> |
| 56716 | <p>CTGACCTTAATAGAAACATTGAAAGATGGAGATTGACAGTCAGTAAACCGGAAAGGC ATTCAATTGGAGATGGATCAAGGTCCAGGCTCATGGAGACACTGAAAAGTTGAAAG GTGCAAATGGAGGAGAACAGCAGTTATGATAGTCAGTAACTGGTTTGGCAGA GTTGTAGAAAAGTTAAAGATTGAAATGGTGAGGGTATGACATGAGAA GGAGGGTGAAGTAAATAAGACAAATTGAGGCTGGATCTTCAGGGACTGGGGAAAG [T, G] TTGGGTATCTTAAAGATGGCATGGCAGTCTGACATACAGGAATAGTTGATCCACTGCCA ATCATACCTCTATGCAATTGAGGCTGGCTTAAGGATATTGCAAAGAACATACTGG</p> |

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| | GGGAGAACATCAGACTTGTCTAGTTGCTTGGGTCCCGGGTAGTCACCACTACAGCAA TGTGGGAGCTAACTGCATGCTAAGCTTGCATGCAGGGATGCCAAACCTTCTGTAAA AACCCAGATAGTAAATGTTAGATTGTGAGCCATACGGTCTGTACAATTACTCA |
| 58247 | CCAAGGAAACACAGTTATTATAAGTGCAAAGTCAGGCCTCAAACACTCAGCTCTGCTCCC ACAGCTGACACTCTAACCAACACATTGCTTATTGCAACAATGCAGCATTCTTCATTA GTGGTATGTTAATGTGAAGAACCCAGCACTTGGACCACTGCCTTATAAGGATCCTTGAA ACCAAGATTTATGTTGGTGAAGGGCAGAGAGCTAAATCACCAAAATGTGAAGTAGAG ACAGACCAGAATGTAATCTCATGAAAGCAATGTCCTCTGTGTTTTAATTTCAC [C, T] ATGTTATCCCTAGCACTTAGTTGTCTGATAAAATATTGAAATAATGCATCAGTATGTG AACATTATTGAAATTATTTCTTTAAATACAAAATCTCATACCCACCTAGGCCA AGCTTAACCCGGGGCTCAGGCCATGCAGGCCAACACGGCTTGAATGAGGCCAAT ACAATTGTAAGTCTTAAACACATTGAGACTTTGTGATTTTTAGCT CATCAGCTATTGTTAGTGTATGTGATGTTGAGACAATGCTCTTCTT |
| 62318 | CTAACCTGTCTATCTTAATAGGATGTTGTAAGAATTAACAGTAAATAATGTACAGTCTGCC TCACAATCATCTGGACGGCTTGAGAAAGCACAGATTGCCAGATCCCACCCCCAGAGGTTC TAATTCACTAGGTCTGGGGTTGGACCCAAGAATTATATCTTTTATTATGATGATGA TTATTATACTTAAAGTTAGGGTACATGTCACAATGTGCAGGTTAGTTACATATGTAT ACAATGAATTATATTCTTAACAGCTCTCAAGTGTATGCTGATATACTGGTCTGGGAT [T, C] ACAGTAAGAAAACCACTGCTTAGGTCAATGCAGTTTTTAAAGCTATTATTCATAA CTGGCTCAAGAGTCATGTAAGTGTGATTATGTTATTATGTGTCTAGACCTTAATAG ACTACTCAGGATATGCACAAATAGAAGATGTAATATTCTGTAGCATCCCTACACCAA ATCGGCTTGCTCGTCATGCAAGTAAATGTGTTGATTTATTGTCTCGTGTG GCTTCTAGTCTCACTAGAAAGACATACATTATTGAAATGTTGAGAATGATATTATCA |
| 62429 | CAGAGGTTCTAACTCAGTAGGTCTGGGGTGGACCCAAGAATTATATTCTTTTATTAA TGATGATGATTATTATACTTAAAGTTAGGGTACATGTCACAATGTGCAGGTTAGTTA CATATGTATACAATGAATTATATTCTTAACAGCTCTCAAGTGTGATGATAGCTGG TCTGGGGATTACAGTAAGAAAACACTGCTTAGGTCAATGCAGTTTTTAAAGCTA TTATTCTATAACTGGCTCAAGAGTCATGTAAGTGTGATTATGTTTATTATGTGTCTAGA [C, A] CCTTAATAGACTACTCAGGATATGCACAAATAGAAGATGTAATATTCTGTAGCATTCC CTACACCAATCGGCTTGCTCGTCATGCAAGTAAATGTGTTGATTTATTGTT CTTCGTGTGGCTCTAGTCTCACTAGAAAGACATACATTATTGAAATGTTGAGAATGA TATTATTCTATTGAAATAAAATGGATCTTTACAGTTTTGTTGTTGTTGTTCTTA ATGAGCAGGCCTATGATTCTAAAGGACTTTTATTCTATTGAAACCTTGATAG [A, G] |
| 62449 | GTCTGGGGTGGACCAAGAATTATATTCTTTTATTATGATGATGATTATTACTT TAAGTTTAGGGTACATGTCACAATGTGCAGGTTAGTTACATATGTATACAATGAATT ATATTCTTAACAAGCTCTCAAGTGTGATGATAGCTGGCTGGGGATTACAGTAAGAA AACCACTGCTTAGGTCAATGCAGTTTTTAAAGCTATTATCTATACTGGCTCAAG AGTCATGTAAGTGTGATTATGTTTATTATGTGTCTAGACCCCTTAATAGACTACTCAGG [A, G] TATGCAACAAATAGAAGATGTAATATTCTGTAGCATTCCCTACACCAAAATGGCCTTGC TCGGTCATGCATAGTTAATGTGTTGATTTATTGTCTCGTGTGGCTCTAGTCT CACTAGAAAGACATACATTATTGAAATGTTGAGAATGATATTCTATTGAAATAAA TCGGATCTTTACAGTTTTGTTGTTGTTCTTAATGAGCAGGCCATGATTCC TAAAGGACTTTTATTCTATTGAAACCTTGATAGAAACTGCATCTTCATGTGA |
| 62450 | TCTGGGGTGGACCAAGAATTATATTCTTTTATTATGATGATGATTATTACTT AAGTTTAGGGTACATGTCACAATGTGCAGGTTAGTTACATATGTATACAATGAATT TATTCTTAACAAGCTCTCAAGTGTGATGATAGCTGGCTGGGGATTACAGTAAGAAA ACCACTGCTTAGGTCAATGCAGTTTTTAAAGCTATTATCTATACTGGCTCAAGA GTCACTGTAAGTGTGATTATGTTTATTATGTGTCTAGACCCCTTAATAGACTACTCAGG [T, A] ATGCACAAATAGAAGATGTAATATTCTGTAGCATTCCCTACACCAAAATGGCCTTGC CGGTCACTGCAAGTAAATGTGTTGATTTATTGTCTCGTGTGGCTCTAGTCTC ACTAGAAAGACATACATTATTGAAATGTTGAGAATGATATTCTATTGAAATAAA CGGATCTTTACAGTTTTGTTGTTCTTAATGAGCAGGCCATGATTCC AAGGACTTTTATTCTATTGAAACCTTGATAGAAACTGCATCTTCATGTGAC |
| 62554 | GTATACAATGAATTATATTCTTAACAAAGCTCTCAAGTGTGATAGCTGGTCTGG GGATTACAGTAAGAAAACACTGCTTAGGTCAATGCAGTTTTAAAGCTATT CATAACTGGCTCAAGAGTCATGTAAGTGTGATTATGTTTATTATGTGTCTAGACCC AATAGACTACTCAGGATATGCACAAATAGAAGATGTAATATTCTGTAGCATTCC ACCAAATGGCCTTGCTCGTCATGCATACTTAATGATGTTGATTTATTGTCTC [G, A] TGTGGCTCTAGTCTCACTAGAAAGACATACATTATTGAAATGTTGAGAATGATATT |

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| | TTCATTGGAATAAAATCGGATCTTTTACAGTTTTGGTTGTTCTTAATGAG CAGGCCTATGATCCTAAAGGACTTTTATTTCATTGAAACCTTGATAGAAACT GCATCTTCATGTGACCACTCTCATTTCCTGCTCATATGACCACATTCCAGTAGTC TTAAGGCTCAGTTGGATGGATTGATTAATGGAAGAGAACAGATAGCTGTAA |
| 63688 | AGAGGTCCCAAACGGTGTCTATGGATTGATCCAGTGATTTATGTGAGCATAACTT TTAAGGAGAGAGAAGAAATTGACTTGCATCAACATTACAAAAAAACATCATGA GACTTGAATAGAAATTGGATTTCAGCAAAAAAAAAGAAAAAGAAGAGGTT TGGCAGTACTGGACTCCATCTTAAGGGTAACAGCGAATGCTGCCACGTCTGTAAAG AACCACACTCTCAGTTGCTGTCCATACCAGCTGTGACTCCTTACATTAC [T, C] GCTTGACTCCTAAAGGATTTCATAATTAGTGGCTGTTTGTCTCTTGGCAAGTCAC AGACATTACAGAGTTGAAAGCTAACAGGAGTCCTGAGAACAAAGGATTCTAATGTTACT TCACATCAAATCACCTAACCTAACCGAGCTGCATCAGTACCAATTAAATAAGAA TCTCTGGGAGGAGCAAGCTGTCAGGATTTTTAATCCCCAGATGATTCCAGTA TACAGATCAGTTCATCTAAGAACCAAGTACCTTGAAGAAACTACTCAGAATTATTGTG |
| 64921 | CGAATGAGAGGCATAAGACAGAGTGAAGAAGACTGAGGCAGGTTCAGAGCAGGAGTGAATG TTTATTAAGGCTTAAAGGTTAGAACAGGAATGAAAGAAAGTAAAGTACACTTGAAGAGGGTTA ACGGGAGACTTGAGAGACCAAGTGCATGCTTGCACCTCTGACTTGGGTTTATGTGCT GGTGTCTCGGGGCTTACATTACTCTCCACTGATTCTCCATTGGGATGGACTGTC CATATGACAGTGGCTGTTAGTGTGAGGAGCCGATGCACAGTGTGTTACTGAA [G, A] TTGTATCCATGCTCACGTGAGGCATTCTCCCTTACCAAGTATTGCTAGAACCATATGCCA GTTAAACTCCACCATTTGCCTCTTAGTGTGATGCTGAGCTCATTCAACCCAGTTCTG AGATATTGGAAATGCGATCACCAAGTTTCAAGGTTTCTATCCATTGGAAACTGCCCT TCCCTGCACGGCTGCAACCAATTATTATTAGAGAGACAGTTAATAATGCCCTATC ATCTGATGGTTGCCGTGACATTCTTGTGGTGGCAGCAGGGGGACCCCTCCTGTCC GC |
| 64934 | TAAGACAGAGTGAAGAAGACTGAGGCAGGTTCAGAGCAGGAGTGAATGTTATTAAAGC TTAGAACAGGAATGAAAGAAGTAAAGTACACTTGAAGAGGGTTAACGGGGAGACTG AGAGACCAAGTGCATGGTTGACCTCTGACTTGGGTTTATGTGCTGGTGTGCTCGGG GGCTTACATTACTCTCCACTGATTCTCCATTGGGATGGACTGTCATATGCACAGTG GCCTGTTAGTGTGAGGAGCCGATGCACAGTGTGTTACTGAAAGTGTATCCATGC [T, C] CACGTGAGGCATTCTCCCTTACCAAGTATTGCTAGAACCATATGCCAGTTAACCTCACC ATTTGCCTCTTAGTGTGATGCTGAGCTCATTCAACCCAGTTCTGAGATAATTGGAAA ATGCGATACCAGTTCAAGGTTTCTATCCATTGGGAAACTGCCCTCCCTGGCACTGG CTGCAACCAATTATTATTAGAGAGACAGTTAATAATGCCCTATCATGTGATGGTTGC CTGACATTCTTGTGGTGGCAGCAGGGGGACCCCTCCTGTGCTGTGACTA |
| 65150 | GATGGACTGTCCATATGCACAGTGGCTGTTAGTGTGAGGAGCCGATGCACAGTG TGTTTACTGAAGTTGATCCATGCTCACGTGAGGCATTCTCCCTTACCAAGTATTGCTAG AACCATATGCCAGTTAAACTCCACCATTTGCCTCTTAGTGTGATGCTGAGCTCATT ACCCAGTTCTGAGATATTGGAAAATGCGATCACCAGTTCAAGGTTTCTATCCATTG GGAAACTGCCCTCCCTGGCACTGGCTGCAACCAATTATTAGAGAGACAGTTAA [T, A] AATCGCCTATCATCTGATGGTTGCCGTGACATTCTTGTGGTGGCAGCAGGGGGACCC TCCGTCTGCTGCTCTGACTAGCTACCTACTGTAATAATGGGTCAGATTAGAAA ACAGGTCCTACCCCTCCCCCTCCCCACCCAGTTAGCTCAAGATCACATAATTATGAA ATAGAAGAGCTGATACATAGAGAAAAATGTTCAAGTGTCTTATAAGTGGTCAA TCGTGAGCTCTTGTGGTGGAGTTGTAAGTTATGTGGCAGCCTCTCCTTCAAGGTG |
| 65198 | GCATGCACAGTGTTTACTGAAGTTGATCCATGCTCACGTGAGGCATTCTCCCTTAC CAGTATTGCTAGAACCATATGCCAGTTAAACTCCACCATTTGCCTCTTAGTGTGATGC TTGAGCTCATTCAACCCAGTTCTGAGATATTGGAAAATGCGATCACCAGTTCAAGGTT TTCATCCATTGGGAAACTGCCCTCCCTGGCACTGGCTGCAACCAATTATTAGA GAGACAGTTAATAATGCCCTATCATGTGATGGTGCCTGACATTCTTGTGGTGGCAGC [A, G] GGGGGGACCCCTCCTGCTGCTCGTGTCTGACTAGCTACCTACTGTAATAATGGG GCAGATTGAAACAGGTCTTACCCCTCCCCCAGTTAGCTCAAGATCA CATATTGAAATAGAGAGCTGATACATAGAGAAAAATGTTCAAGTGTCTTATAA GTGGTCAAACACTCTGAGCTCTTGTGATGGGTTGAGTTGTAAGTTATGTGGCAGC TCCCTTCAGGTGAGAATGAAGCAGTCAGCCAGGCTAATTGCTAGTTATGAGTGAC |
| 65674 | TATAAGTGGTCAAAACTCTGTGAGCTTCTTGATGGGTTGAGTTGTAAGTTATGTGGCA GCCCTCTCTTCAAGGTGAGAATGAAGCAGTCAGCCAGGTCAATTGCTTAGTTATGAG TGTACTGAGTAGGTAACCTCTCAATTAGTTAATTGAGGCTGCAATTGGAGAGTTGAT GCTGAAACATTCTCAGGACCAAAATTCTTCAAGGCTAGCCACTCTCTGAGCTGAA AATGCTGTGATGGTGAATTCAATTCTCTAGATCCATGTTTTAAGTATATTCAAAGG [A, T] |

FIGURE 3, page 85 of 122

CTATGTGTATCGGAATCCCTTGAGACTCTAGTTAATGACTGTCCACGTCCCACCTCCAGA
 GATTCCGAGTCAGTAAATCTGGGGTGGGCTCAGGAAGTGGTTTTGTTGTTGCTG
 CTTTGTGTTGTTTGAGATGGAGTTTACTCTGTTGCCAGGCTGGAATGCAGTGGCGT
 GATCTGGCTCACTGCAACCTCTGCCTCCAGGTTCAAGCGATTCTCCTGCCTCAGCCTC
 CCAAGTAGCTGGGATTACAGGTGCCACCAGCATGCCAGGCTAATTTATATTTAGT

 65720 TAAGTTATCTGGCAGCCTCTCCTTCAGGTGAGAATGAAGCAGTCAGCCAGGTCTAATTG
 CCTAGTTATGAGTGTACTGAGTAGGTAACCTCTCAATAGTTAATTGAGGTCTGCA
 ATTGGAGAGTTGATGCTGAAACATTCTCAGGACCAAGAAAATTCCCTCAGGCTAGCCAC
 TTCTCTGAGCTGAAATGCTGTCATGGTGAATTCAATTCTCAGATCCATGTTTTAAG
 TATATTATCAAAGGACTATGTGTATCGGAATCCCTTGAGACTCTAGTTAATGACTGTCCA
 [C, G]
 GTCCCACCTCCAGAGATTCCGAGTCAGTAAATCTGGGGTGGGCTCAGGAAGTGGTTTT
 TGTTGTTGTTGCTGTTGTTGAGATGGAGTTTACTCTGTTGCCAGGCTG
 GAATGCACTGGCGTGTACTGGCTCACTGCAACCTCTGCCTCCAGGTTCAAGCGATTCT
 CTCGCTCAGGCTCCAAAGTAGCTGGGATTACAGGTGCCACCAGCATGCCAGGCTAATT
 TTTATTTTAGTAGAGACGGGTTCCCCATGTTGCCAGGCTGGTACAACACTGCTG

 65820 AGTTTAATTGAGGTCTGCAATTGGAGAGTTGATGCTGAAACATTCTCAGGACCAAGAAA
 TTTCCTTCAGGCTAGCCAATTCTCTGAGCTGAAATGCTGTCATGGTGAATTCAATTCT
 CTAGATCCATGTTTAAGTATATTATAAAGGACTATGTGTATCGGAATCCCTTGAGA
 CTCTAGTTAATGACTGTCCACGCTCCACTCCCAGAGATTCCGAGTCAGTAAATCTGGGGT
 GGGCTCAGGAAGTGGTTTTGTTGTTGCTGCTTGTGTTGAGATGGAGT
 [T, C]
 TTACTCTGTTGCCAGGCTGGAATGCAGTGGCGTGTACTGGCTCACTGCAACCTCTGCC
 TCCCAGGTTCAAGCAGATTCTCCTGCCTCAGCCTCCAAAGTAGCTGGGATTACAGGTGCC
 ACCAGCATGCCAGGCTAATTGTTATTTTAGTAGAGACGGGTTCCCCATGTTGCC
 AGGCTGGTCACAAACTGCTGACCTCACATGATCTGCCACCTCAGCCTCCAAAGTGCTG
 GAATTACAGGCATGAGCCACTGCACCTGCCAGGAAGTGGCATTTCAGAAAACATC

 65948 ATGTTTTTAAGTATATTCAAAGGACTATGTGTATCGGAATCCCTTGAGACTCTAGTT
 AATGACTGTCCACGCTCCACTCCCAGAGATTCCGAGTCAGTAAATCTGGGGTGGGCTCA
 GGAAGTGGTTTTGTTGTTGCTGTTGTTGAGATGGAGTTTACTCT
 GTTGCCAGGCTGGAATGCAGTGGCGTGTACTGGCTCACTGCAACCTCTGCCTCCAGG
 TTCAAGCGATTCTCTGCCTCAGCCTCCAAAGTAGCTGGGATTACAGGTGCCACCAGCA
 [T, C]
 GCCAGGCTAATTGTTATTTTAGAGAGACGGGTTCCCCATGTTGCCAGGCTGGT
 CACAAACTGCTGACCTCACATGATCTGCCACCTCAGCCTCCAAAGTGCTGGAATTACA
 GGCATGAGCCACTGCACCTGCCAGGAAGTGGCATTTCAGAAAACATCCAAGTGAT
 TTTGATGCAAGGTAGTAGGCCAGATGCAGAGAAATATGATAAAAGGTAATGCTTCT
 TCCCTGTCTACTAGTATAGTGACCATTCTCTGAATCAAATACTGCAGCCTGAAACT

 65978 TGTGTATCGGAATCCCTTGAGACTCTAGTTAATGACTGTCCACGTCCCACCTCCAGAGAT
 TCCGAGTCAGTAAATCTGGGGTGGGCTCAGGAAGTGGTTTTGTTGTTGCTGCTGCTT
 TGTTTGTGTTGAGATGGAGTTTACTCTGTTGCCAGGCTGGAATGCAGTGGCGTGT
 CTTGCCACTGCAACCTCTGCCTCCAGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCA
 AGTAGCTGGGATTACAGGTGCCACCAGCATGCCAGGCTAATTTATATTTAGTAGA
 [G, A]
 ACGGGTTCCCCATGTTGCCAGGCTGGTACAAAAGTGTGACCTCACATGATCTGCC
 ACCTCAGCCTCCAAAGTGTGAAATTACAGGCATGAGCCACTGCACCTGCCAGGAAGT
 GGCATTTCAGAAAACATCCAAGTGATTTGATGCAAGGTAGTAGGCCAGATGCAGAG
 AAATATGATAAAAGTAAATGCTTTCTCCCTGTCTACTAGTATAGTGACCATTTC
 TCCGAATCAAATACTGCAGCCTGAAACTAGTTAAAACCAGGGTTGTGCCATACTTCTA

 65988 AATCCCTTGAGACTCTAGTTAATGACTGTCCACGTCCCACCTCCAGAGATTCCGAGTCAG
 TAAATCTGGGGTGGGCTCAGGAAGTGGTTTTGTTGTTGCTGCTTGTGTTGTT
 TTGAGATGGAGTTTACTCTGTTGCCAGGCTGGAATGCAGTGGCGTGTACTGGCTCAC
 TGCAACCTCTGCCCTCCAGGTTCAAGCGATTCTCTGCCCTCAGCCTCCAAAGTAGCTGG
 ATTACAGGTGCCACCAGCATGCCAGGCTAATTTATATTTAGTAGAGACGGGTT
 [C, T]
 CCCATGTTGCCAGGCTGGTACAAAAGTGTGACCTCACATGATCTGCCACCTCAGCCT
 CCCAAAGTGTGAAATTACAGGCATGAGCCACTGCACCTGCCAGGAAGTGGCATTTC
 AGAAAACATCCAAGTGATTTGATGCAAGGTAGTAGGCCAGATGCAGAGAAATATGATA
 TAAAGGTAATGCTTTCTCCCTGTCTACTAGTATAGTGACCATTCTCTGAATCA
 AATACTGCAGCCTGAAACTAGTTAAAACCAGGGTTGTGCCATACTTCTACTCAGCTCAG

 66089 TTGCTGTTGTTGTTGAGATGGAGTTTACTCTGTTGCCAGGCTGGAATGCAG
 TGGCGTGTCTGGCTCACTGCAACCTCTGCCCTCCAGGTTCAAGCGATTCTCCTGCC
 AGCCTCCAAAGTAGCTGGGATTACAGGTGCCACCAGCATGCCAGGCTAATTTTATATT
 TTAGTAGAGACGGGTTCCCCATGTTGCCAGGCTGGTACAAAAGTGTGACCTCACA
 TGATCTGCCACCTCAGCCTCCAAAGTGTGGAATTACAGGCATGAGCCACTGCACCTG

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| | [G, T] | CCAGGAAGTGGCATTTCAGAAAACATCCAAGTGATTTGATGCAGGTAGTAGGCCA GATGCAGAGAAATATGATAAAGGTAAATGTCCTTCTCCCTGCTACTAGTATAGTG ACCATTTCTCTGAATCAAATACTGCAGCCTGAAACTAGTTAAAACCAGGGTGTGCC ATACTCTACTCAGCTCAGAAGGAGGCTCCATTGAGAACACATGGGTTCTTTGCT ACCAGGACATGCAGCTTGGAACCTCTGATTCTCAGTGATGTAGGCATTCTAGCATAC |
| 66332 | TCTGCCACCTCAGCCTCCAAAGTGTGAAATTACAGGCATGAGCCACTGCACCTGGCC AGGAAGTGGCATTTCAGAAAACATCCAAGTGATTTGATGCAGGTAGTAGGCCAGA TGCAGAGAAATATGATAAAGGTAAATGTCCTTCTCCCTGCTACTAGTATAGTGAC CATTTCCTCTGAATCAAATACTGCAGCCTGAAACTAGTTAAAACCAGGGTGTGCCCAT ACTCTACTCAGCTCAGAAGGAGGCTCCATTGAGAACACATGGGTTCTTTGCTAC [C, T] AGGACATGCAGCTTGGAACCTCTGATTCTCAGTGATGTAGGCATTCTTAGCATAACAGC AGCCTGGAAATTATCATAATGTACATGTCACAGGAGGATATGAAATAGAGTAAACACCTT TTTATAGACTTTAGATTTGAGGCTCACTACAGCAGCCTTGCAACTTTAAAAAA GAACCAATAATGATCTTGGATGTTCATAAAGCTCACACTCTGCTGTCCCATACTA GATTCTGATACACTTGAAGGATGTCCACCATGAGTGTCACTACATACAGGGAG | |
| 66361 | GAATTACAGGCATGAGCCACTGCACCTGGCCAGGAAGTGGCATTTCAGAAAACATC CAAGTGATTTGATGCAGGTAGTAGGCCAGATGCAGAGAAATATGATAAAGGTAAATG TCCTTCTCCCTGCTACTAGTATAGTGACCATTTCTCTGAATCAAATACTGCAGCC TTGAAACTAGTTAAAACCAGGGTTGCCCCACTTCTACTCAGCTCAGAAGGAGGCTCTC CATTGAGAACACATGGGTTCTTTGCTACCAGGACATGCAGCTTGGAACCTCTGATTC [T, G] CACTGATGTAGGCATTCTTAGCATACAGCAGCCTGAAATTATCATAATGTACATGTC ACAGGAGGATATGAAATAGAGTAAACACCTTTTATAGACTTTAGATTTGAGGCTCTA CTACAGCAGCTTGGCAACTTTAAAAGAACCAATAATGATCTTGGATGTTCA TAAAGCTCTACACTCTGCTGTCCCATACTAGATCTGATATACTTAACACTTGAAGGATG TCCACCATTGAGTGTCACTACATACAGGGACAATTCCATTTCATTTCGCGCATTCC | |
| 67130 | CTCCTGGCAGGTATTTCCCCCTTCCTTATTCCAACTAAGACTCACTTGCACCGCAAAGAC CAGGGCCTCATGGAAGAAGGCAGCTGGCACAAGGCTGTTGCCATGGAAAGCTTAGGGC GGAAGCATTGATGGTCTCTGCATACAGAGACTGATCTAGAAGGCTCAGTGTGCTGA ATGGACCTGTCTGGCTGGAATTTCAGTCAGTCTGACAGACTGCTAAAGGAGACTCAGGT GTACACTCAGCAACTTGATAACTCTTCCCCAGCTGAAAGTCGAATCATTGATCCAACG [G, A] GAAAGAAGCTAAAATTGTCCTGACAGCTAAAGAGCGATCTGACCTTGTGATCAGGAGGA GAATTTCTTGTGATACAGAAAGTGAAGTGAAGAACTGGAATGTGGTATTGATGTAAG GCATTTCAGAGCAGCAGGCAGCTGCCATTCACTAAAGAGTGCACAGTGTGACAGGACATGCT TTATCCTATTGAAACCATGCCAAACTTGGGACACTTAGGTATCATTGTTTCTATT CCATTAAAGAACCTGAGGATTAAAGCTGTTAACCTGTTGAAATGAGTACTG CCATTAAAGAACCTGAGGATTAAAGCTGTTAACCTGTTGAAATGAGTACTGTTGAAATGAGTACTG | |
| 67148 | CCCCCTCCTTATTCCAACTAAGACTCACTTGCACCGCAAAGACCAGGGCTCATGGAAAGA GGCAGCTGGCACAAGGCTGTTGCCATGGAAAGCTTAGGGCGGAAGCATTGGTATTGGTC TCTGCATACAGAGACTGATCTAGAAGGCTCAGTGTGCTGAATGGACCTGTCTGGCTG GAATTTCTAGTCAGCTGACAGACTGCTAAAGGAGACTCAGGTGACACTTCAGCAACTTG ATAACTCTTCCCCAGCTGAAAGTCGAATCATTGATCCAACGGGAAAGAACGCTAAAATTG [T, C] CCTGACAGCTAAAGAGCGATCTGACCTTGTGATCAGGAGGAGAATTCTGTGATACAG AAAGTGAAGAAGTAGAAACTGGAATGTGGTATTGATGTAAGGCATTAGAGCAGCAGGC ACTGCCATTCACTAAAGATTGCACTGTGTCAGGCACATGCTTATCATTGAACCATC ATGCCAAACTTGGGACACTTAGGTATCATTGTTTCTATTCCATTAAAGAACCTGAGGA TTAAAGCTGTTAACCTGTTGAAATGAGTACTGTTGACAGTGTGGCTGGGTTGAAAC | |
| 67541 | GATGATGAAGGCATTAGAGCAGCAGGCACTGCCATTCACTAAAGATTGCACTGTGTC GGCACATGCTTATCATTGAACCATCATGCCAAACTTGGGACACTTAGGTATCATTGT TTTCATTTCATTAAAGAACCTGAGGATTAAGCTGTTAACCTGTTATAGCTGCAATTCTTCA ATGAGTAGTATGTCAGGCTGGGTTGAAACCTTGTGTTAGCTGCAATTCTTCA TAATTGTTGAACTACAGGTGTTCTGGGCTATTCTGATCTTGCACAGTGTGGGG [G, T] AAAGTGGTCTTTAGGAATTCAACTATTCTCTATTAGTTATGGCAAGAAAGGAGA GGCTCAGAGATCAGTGTGCTCAAAAGCTGCTCTCCCTGAGCCGACTTAATATG CTCCTAGCTCCCAGTCCAGTGTGTCAGCAAGATCGGAAGCTAAATATTCCCTGAAAGCT TTATAATCTATTGAGAACACAAACAGAGTTGCTGGGAGTTTCCAAGGCAAGTAA CTTTTCTATTAGTTGGATCCCTGAACCTTAAGGAGTACTGAACTGAGTAA | |
| 67608 | GCTTCTATTGAAACCATCATGCCAAACTTGGGACACTTAGGTATCATTGTTTCT TTCCATTAAAGAACCTGAGGATTAAGCTGTTAACCTGTTGATGGTGAATGAGTA GTATGTCAGGCTGGGTTGAAACCTTGTGTTAGCTGCAATTCTTCA TGAACCTACAGGTGTTCTGGGCTATTCTGATCTTGCACAGTGTGGGGCGAAAGT CTTTTCTATTAGTTGGATCCCTGAACCTTAAGGAGTACTGAACTGAGTAA | |

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| | GGTCCTTTAGGAATTCAACTATTCTCTCATTAGTTATGCCAAGAAAGGAGAGGCTCA [G, A] AGATCAGTGGTGCCTAAAAGGTGCTCTCCCTGCAGCCGACTTAATATGTCTCTAG CTCCCAGTCCAGTGCTCCAGCAAGATCCGGAAGCTAAATATCCCTGAAGCCTTTATAAT CTATTGAGAATACACAACAGAGTGCTGGGAGTTTCTCAAGGCAGTAAGTCTCATTTT CTTATTAGTTGGATCCCTGAACCCCTAACGGTAGTATCTCAAATGCAGTTAAGTGTCA ACCAATATTGTTGCAAGAATAAACATTACTAGTAAGAAATGTGATCTGGAGACAATAT |
| 67670 | TCCATTAAGAACATTGAGGATTAAGCTGTTAATCTATCTGTCACTGGTAAATGAGTAGT ATGTGGCCTGGGTTGAAACCTTGTATAGCTGCAATTTCAGAGCTTTAATTGTTG AACTACACGGTGTCTGGGCTATTCTGATCTTGACAGTGTGGGGCGAAAGTGG TCCTTTAGAATTCAACTATTCTCTCATTAGTTATGCCAAGAAAGGAGAGGCTAGA GATCAGTTGGTGCCTCAAAGTCGCTCTCCCTGCAGCCGACTTAATATGTCTCTAGC [T, C] CCCAGTCCAGTGCTCCAGCAAGATCCGGAAGCTAAATATCCCTGAAGCCTTTATAATCT ATTGAGAATACACAACAGAGTGCTGGGAGTTTCAAGGCAGTAAGTCTCATTTTCT TATTAGTTGGATCCCTGAACCTTAAGGTAGTATCTCAAATGCAGTTAAGTGTCAAC CAATATTGTTGCAAGAATAAACATTACTAGTAAGAAATGTGATCTGGAGACAATATT TATGTCCTAGTCTAGTTCTATTGAAATAAGCAGGTGTGTTAGATATTTC |
| 70638 | GACATGCCAGCCTCTTCCCTTCCGGACCTTGGAAACCCCTGTCCATTGTAACCAAG TTTGATGGCTAACGCTCATTTCATCATGTTCTCTAGACAACGCCATGCAAGCTTCTG CTCCAGCCCCCTGGAGCTCTGATTGACACTAATCTCAGGCCCTCCAAGGAAGCATCA TTCAGACCTTCCCTGCTTCTGCAAGAGGCACATGTAGTACAGTACGTGAGGGCTTCTATG GAGCTGCTCTCATTTGTCATTAACTTCTCCCTGGGAGGAGGCATGCCAGGGAGGG [C, T] GTTTATCAAGATGAGGCACATGACAATAGGAGCACAGATTCCAGTCCCTGTTTGT TCAGAAGTTCGCTTCCAGACTTGGCAAATCCTTAATGTCCTTGCTTAAACCTTG ACTAGCTTCAATGTTTGGGACAAGGACTCAAGGCCTAGAGATCTGTGATCT CTACATGTGTAATAATATAAACATAATAGCTGTTTATCAACTATGCA TGTACATGACTGTATGTCTACTTTATATGCAACTGGCAGCACAGTAGTTCTTA |
| 70767 | CTTTGGAGCTCTGATTGACACTAATCTCAGGCCCTCCAAGGAAGCATTCAAGACCT TCCCTGCTTCTGCAAGAGGCACATGTAGTACAGTACGTGAGGGCTTCTATGGAGCTGCTC TCATTTGTCATTAACTCTCCCTGGGAGGAGGCATGCCAGGGAGGGCTTATCA AGATGAGGCACATGACAATAGGAGCACAGATTCCAGTCCCTGTTTGTATCAGAAGT TCGCTTCCAGACTTGGCAAATCCTTAATGTCCTTGCTTAAACCTTCACTAGCTT [T, C] TCAATGTTTGGGACAAGGACTCAAGGCCTAGAGATCTGTGATCTCTACATGTG TAATAATATATAAACATAATAGCTGTTTATCAAGTATCATGCACTGTACATGA CTGTATGTCTATACTTTATATGCAACTGGCACACAGTAGTTCTTAAACAGCAT CAACACAAACACATTAGTAATGCAATTGTTACAACATTACCATGGCAGAGATATTACTA GACAATAGGAATTTCAGCTCTATTATAACTTATGGGACCACATCATATAAGCAGGT |
| 71275 | TGTTACAACATTACCATGGCAGAGATATTACTAGACAATAGGAATTTCAGCTCTATT TAATCTTATGGGACCACCATCATATAAGCAGGTATTGTAACAAAACATCATTACATG GTACATGACTATATTTGGTATAATTACAAAAAAATTGCTGACTTTGCCTAC CTACCCAGCTCTACTCCCTGAGTCACTCCTTGTGCACTCCAACCCCACTCACCTAT CTGTTATCCTGACACACCCATTGCTCTTCAATTGGCTTATCCTACAAAGTT [G, A] CTGTTACAAAGTTACTCTGAAATAGAGGTCACTTTGAAGACTAGAAAACCAAGGC ACAGAGACTACATGCCCTGCCAAGTTGCATAGTTGAAATGGAAAAGCTGGGGAAA ATCCACGGAAACTGGCTCTGGATTCCATGCTATTGACCAACTCCTGACTTCCGCCCTG CTAGACCTTAGTGGTGGCATGAAATAAAGGATGTAGGAACAGTGTGCAAGAGTCTG TTGGATTATTTAGCTGAAATCTCATATGGCTTTATAGAATATTAGACTTACAGA |
| 71401 | GACTATATTGGTATAATTACAAAAAAATTGCCGACTTTGCCCTACCTACCC AGCTCTACTTCTTGAGTCACTCCTTGTGCACTCAACCCCACTCACCTATCTGTA TCCTCTGACACACCCATTGCTCTCCATTGGCTTATCCTACAAAGTTGCTGTT TACAAAGTTACTCTGAAATAGAGGTCACTTTGAAGACTAGAAAACCAAGGCACAGA GACTACATGCCCTGCCAAGTTGCATAGTTGTAATGGAAAAGCTGGGGAAAATCCA [C, A] GGAAACTTGGCTCTGGATTCCATGCTATTGACCAACTCCTGACTTCTGCCCTGCTAGAC CTTAGTGGTGGCATGAAATAAAGGATGTAGGAACAGTGTGCAAGAGTTCTGTTGGAT TATTTAGCTGAAATCTCATATGGCTTTATAGAATATTAGACTTACAGAGCTCTT TGCTCTGGTTATGGACTTAGGTTCTAAATTGTCATCTCTCTAGATAACTTTCA AACTTACAGCACCCACAGGACTGGATGTGCTTTGGAGGTACCATGGAGGCTGATA |
| 71656 | CCCAAGTTGCATAGTTGTAATGGAAAAGCTGGGGAAAATCCACGGAAACTGGCTCT GGATTCATGCTATTGACCAACTCCTGACTTCTGCCCTGCTAGACCTAGTGGTGGTC ATGAAATAAAGGATGTAGGAACAGTGTGCAAGAGTTCTGTTGGATTATTTAGCTGAAA |

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|-------|---|
| | TCTCATATAAGCTTTATAGAATATTAAATGACTTACAGAGCTTTGCTCTGGTTATG GACTTAGTTCTAAATTGTCATCTCCTCTAGATAACTTCAGGAACTTATCAGCAC [C, T] ACACAGGACTGGATGTCTTGAGGTACCATGGAGGCTGATATGGTGTGGCTATATC AAATCTCATCTGAATTGTAGCTCCATAACCCCCACGTGTCAGGGAGGGACCAAGCTGG GAGGTAATTAAATCATGGGTGTGTGTTTCTCGTGCACAGTGAATAAGTC TCATGAGATCTGATGGTTTATAAAGGGCAGTCCCTGCACATGCTTCTGCCAGTGA CCATGTAAGAAGTGCCTTGCTCTTACCATGATTGTGAGGCCTCCCTAGCTGTGCA |
| 71969 | ATGTGCTTTGGAAAGGTACCATGGAGGCTGATATGGTGTGGCTATATCAAATCTCATCTT GAATTGTAGCTCCATAACCCCCACGTGTCAGGGAGGGACAGGTGGGAGGTAAATTAAA TCATGGGTGTGTGTTTCCGTGCTGCTCGTGCACAGTGAATAAGTCTCATGAGATCTG ATGGTTTATAAAGGGCAGTCCCTGCACATGCTTCTGCCCTGCACATGCTTCTGCCA GCCCTTGCTCTTACCATGATTGTGAGGCCTCCCTAGCTGTGCAACTGTGAGTCTA [C, T] TTAACCTCTTTCTTATAAAACTACTCAGTCTGGGTGTGCTTTATTAGCAGCATGAC AACAGACTAGTCTAATACAGGGCTTGGCATAAGCTATGGGCTTGGTTGAGGT CTCCAATATTAGCTGGGAAATTATGTACCAACTAAGATGAGTTGGAGAACGCCTCTG AGAGTAATTAAACCAGAGCAGCAAACAATAGACTCCTACCTGTATGAAAGGACAGACT CACAAGTCAAAGCTCAGGCTGAACTTCTAGCAAAGTGAGAAGGGTAGATCTGAGAC |
| 72194 | CCACCATGTAAGAAGTGCCTTGCTCTTACCATGATTGTGAGGCCTCCCTAGCTGTGTT GCAACTGTGAGTCTACTTAACCTCTTTCTTATAAAACTACTCAGTCTGGGTGTGCTT TTATTAGCAGCATGACAACAGACTAGTCTAATACAGGGCTTGGGCTAAAGCTATGGG CTTGGTTTGAGGTCTCCAATATTAGCTGGGAAATTATGTACCAACTAAGATGAGTT TGGAGAAGCCTCTGAGAGTAATTAAACCAGAGCAGCAAACAATAGACTCCTACCTGT [A, G] TGGAAAGGACAGAGTCACAAGTCAAAGCTCAGGCTGAACCTTCTAGAAAGTGAGAA GGGTAGATCTGAGACAAGGGAGCAGGGATTTTTTAGGTTGATTCTGTATTATGTAA CTTCTCTCCTCAACAGTACAGGTTCTCATGATACATGCTTCAAGACAGCATTGGA GTAAGGATTCTCAGTGGCTTGTATTCAATGGCATTAGTAAACGTGGGAAAGGGA TCAAGAGTCCACATCAGATCCTGGCCCTGGAGCAGCTTCTAGTCGGGGTCTGATGATAG |
| 72292 | CTACTCAGTCTGGGTGTGCTTTATTAGCAGCATGACAACAGACTAGTCTAATACAGAG GCTTGGCATAAGCTATGGGCTTGGTTGAGGTCTCCAATATTAGCTGGGAAAT TATGTACCAACTAAGATGAGTTGGAGAACGCTCCTGAGAGTAATTAAACCAGAGCAGC AAAACAATAGACTCCTACCTGTATGAAAGGACAGAGTCACAGTCAAAGCTCAGGCTG AACCTTCTAGCAAAGTGAGAAGGGTAGATCTGAGACAAGGAGCAGGGATTTTTA [A, G] GTTGATTCTGTATTATGAACTTCTTCTCCTCAACAGTACAGGTTCTTCATGATAC ATGTCCTCAAGACAGCATTGGAGTAAGGATTCTCAGTGGCCTTGGTTTATTCAATGGCA TTTAGTAAACGTGGGAAAGGATCAAGAGTCCACATCAGATCCTGGCCCTGGAGCAGCT TTCTAGTCGGGGTCTGATGATAGCTCAGTCTCTAGTATCTCTGTGCCATTAAAT AAATAATCAGAGAATTGGACTCAGAACTGTGATTCTGTGATTCCTGAGTCAGTTCTG |
| 72351 | GGCTTGGGCATAAGCTATGGGCTTGGTTGAGGTCTCCAATATTAGCTGGGAA TTATGTACCAACTAAGATGAGTTGGAGAACGCTCCTGAGAGTAATTAAACCAGAGCAG CAAACAATAGACTCCTACCTGTATGAAAGGACAGAGTCACAGTCAAAGCTCAGGCT GAACCTTCTAGCAAAGTGAGAAGGGTAGATCTGAGACAAAGGAGCAGGGATTTTTT AGGTGATTCTGTATTATGAACTTCTTCTCCTCAACAGTACAGGTTCTTCATGAT [A, G] CATGCTTCAAGACAGCATTGGAGTAAGGATTCTCAGTGGCCTTGGTTTATTCAATGGC ATTAGTAAACGTGGGAAAGGATCAAGAGTCCACATCAGATCCTGGCCCTGGAGCAGCT TTCTAGTCGGGGTCTGATGATAGCTCAGTCTCTAGTATCTCTGTGCCATTAAAT AAATAATCAGAGAATTGGACTCAGAACTGTGATTCTGTGATTCCTGAGTCAGTTCTT GGCAGGGTCTGAAACTGGTAACTTGACAGCCTGGACCCGTACTCAAGGATGTGAGAC |
| 72382 | TTGAGGTTCTCCAATATTAGCTGGAAATTATGTACCAACTAAGATGAGTTGGAGAAG CCTCTTGAGAGTAATTAAACCAGAGCACAACAAATAGACTCCTACCTGTATGGAAAG GACAGAGTCACAAGCTCAGGCTGAACCTTCTAGCAAAGTGAGAAGGGTAGA TCTGAGACAAAGGAGCAGGGATTTTTTAGGTTGATTCTGTATTATGAACTCTT CTCCTCAACAGTACAGGTTCTCATGATACATGCTTCAAGACAGCATGGAGTAAGG [A, C] TTCTCAGTGGCCTTGGTTTATTCAATGGCATTAGTAAACGTGGGAAAGGGATCAAGAGT CCACATCAGATCCTGGCCCTGGAGCAGCTTCTAGTCGGGGTCTGATGATAGCTACAGTC TCTCTAGTATCTCTGTGCTGCAATTAAATAAAATCAAGAGAATTGGACTCAGAACT GATTCTGTGATTCCTGAGTCAGTCTTGGCCAGGGTCTGAAACTGGTAACCTGTACA GCCTGGACCCGTACTCAAGGATGTGAGACTTGGAGTGGGGTTGAGAGGAGCAGTTCA |
| 72424 | AGATGAGTTGGAGAAGCCTCTTGAGAGTAATTAAACCAGAGCAGCAAACAATAGAC TCCTACCTGTATGGAAAGGACAGAGTCACAAGCTCAGGCTGAACCTTCTTAG |

FIGURE 3, page 89 of 122

CAAAGTGAGAAGGGTAGATCTGAGACAAAGGAGCAGGGATTTTTTAGGTTGATTCTG
 TATTATGTAACTCTTCTCTCAACAGTCAGGTTCTCATGATACTCATCTCAAG
 ACACCATGGAGTAAGGATTCTCAGTGGCCTGTTTATTCAATGGCATTAGTAAACG
 [G, T]
 GGGGAAGGGATCAAGAGTCACATCAGATCTGGCCCTGGAGCAGCTTCTAGTCGGG
 GTCATGATAGTCAGTCCTCTAGTATCTCTGTGCCATTAAATAAAATCAGA
 GAATGGACTCAGAATCTGATTCTGATTCCGCTGAGTCAGTCTGGCCAGGGTCATG
 AAACCTGGTAACTTGACGCCCTGACCGTACTCAAGGATGTGAGACTGGAGTGGGG
 TGAGAGGAGGACAGTCATGACAAGCCTGACCCAACATAGTGTGCCAATTAGCTAG

72466
 AGCACAAAACAATAGACTCCTACCTGTATGGAAAGGACAGAGTCACAAGTCAAAGCTC
 AGGTGAACTCTCTAGCAAAGTGGAGAAGGGTAGATCTGAGACAAAGGAGCAGGGATT
 TTTTAGGTTGATCTCTGATTATGAACTCTCTCTCAACAGTCAGGTTCTTC
 ATGATACATGTCTCAAGACAGCATTGGAGTAAGGATTCTCAGTGGCCTGTTTATT
 AATGGCATTAGTAAACGTTGGGAAGGGATCAAGGATTCACATCAGATCTGGCCCTGGA
 [G, A]
 CACCTTTCTAGTCGGGGTCATGATAGTCAGTCCTCTAGTATCTCTGTGCCAT
 TTAATAAAATAATCAGAGAATGGACTCAGAACATCTGATTCTGATTCCGCTGAGTCAG
 TTCTGGCCAGGGTCATGAAACTGGTAACTTGACGCCCTGACCGTACTCAAGGATGT
 GAGACTGGAGTCGGGGTTGAGAGGAGGACAGTCATGACAAGCCTGACCCAACATAGTG
 CTGCCCCAATTAGCTACAGATAAGCAAACAGTGGCTACCAACTGGTCAGTTCT

72829
 AAATAAAATAATCAGAGAATGGACTCAGAACATCTGATTCTGATTCCGCTGAGTCAGTT
 CTTGGCCAGGGTCATGAAACTGGTAACCTGTACAGCCTGGACCCGTACTCAAGGATGTGA
 GACTTGGAGTGGGGTTGAGAGGAGGACAGTCATGACAAGCCTGACCCAACATAGTGCT
 GTGCCAATTAGCTACACAGATAAGCAAACAGTGGCTACCAACTGGTCAGTTCTTG
 GCAAGGGTCAGGAAGCTGAACTTGAGAGCCTGGACAAGTGTCTGTGATGTCACAAACCC
 [G, A]
 TCCATGTAACTGCTAGTTACTATATGGAACTCAAGTTATTACTTAACGTATTAGCT
 TCCATTCTCTAAGAAATGGGGAAAAAAAGCTTTACCTGGCTTAAAGCAGTTGCAA
 GAATTAAAAAGTTAAATCATGTTTATTATCAGAACATGCCACACATTAAAGTCTC
 AGTATAGGAGAATGTATTACCATCATCACCATCACACCATTATTGCCAAGA
 GAGAGGTATATGCAAAGTGTATAGTGGTCAAAGGAGGGCAATCGCTTCCACAGGA

72913
 AACTTGTACAGCCTGGACCCGTACTCAAGGATGTGAGACTGGAGTGGGGTTGAGAGGA
 GGACAGTTCATGACAAGCCTGACCCAACATAGTCGCTGCCCATTAGCTACACAG
 ATAAGCAAACGTAGGGCTACCAACTGGGTAGTCCTGGCAAGGGTCAGGAAGCTGTAACCT
 GTAGAGCCTGGACAAGTGTCTGTGATGTCACCCCTGCACTGAACTGCTAGTTACTAT
 ATGGAACTCAAGTTATTACTTAACGTATTAGCTTCAAGGAAATGGGG
 [G, -]
 AAAAAGCTTACCTGGCTTAAAGCAGTTGCAAGAAATTAAAGTTAACTGTGTT
 TTTTATTCAGAACATGCCACATTAAAGTCTCAGTATAGGAGAATTGTATTATTCT
 TACCATCATCACCATCACACCATTATTGCCAAGAGAGGGTATATGCCAAGTGTATA
 GTGGTCAAGGAGGGGCAATGCTTCCACCAAGGAAGACAGTGGAGGGTAGTGTGAGGA
 TAAATGAAAACCTGAAATTAAACTGAACTTGAACCTGAAAGGAGACTGTGTGTTGGAAATT

73395
 TGGTCAAAGGAGGGGCAATCGCTTCCACCAAGGAAGACAGTGGAGGGTAGTGTGAGGAT
 AAATGTAACACCTGAAAATTAAACTGAACTTGTGAAAGGAGACTGTGTATGTGGAAATT
 TGGATCAAAGGGATTCCAATAGAAGAACAGCTGACTTAAAGCAAAGCGATAGAACAC
 TGATAACGACTATGAATGGTGAATAGACCAATTGGCTGATTGCTGTACCTAAATGGA
 GATGAGGGTGGAAAGATGCATTGGGGTAAGACTTGTGAGAACCAAGTTCATTGAGAAC
 [C, G]
 AAGTCATTGAGAACAACTACGAATGGTGAATAGACCAATTGGCTGATTGCTGTGAC
 CTAATGGAGGTGGAGGGTGAAGATGCATTGGGGATAACTATGAGAACCAAGTTAAGG
 GAAGTGTGATGAGCAGAGCTATGCTCCAAAAGATTAGCAGGCCATCTACCCATTAT
 GTCTGGGTGCAATTGAGGGATTACAGGATGTGAGACTGGAGTGGGGTAGGAGGG
 GCAGTTCATGACAAGCCTGACCCAACACTGTTGTGCAATTAGCACGACCTATTG

73961
 CACACTTGTGTCACACGACCTATTGGCTTGAATGGGAAGGAGAACATCTG
 TGACCTCTGAGTCAGCCTTATGGAATGCTCAAGACTTACAGGTCTTGCAGATGCATT
 CTCTATCAGTCAGTCTTAAATGGTCTTACTCAGCTTCATTCAATTGGA
 ATTCAATGCTGATGTTGAGTCCATAGGATTCTCAGAAATAACCTGTGACTAGACGAGAG
 AAATATTGACTGTGCAATTGAGGAAAGACTGTTGTGATGCTTGTGATTACTTGATT
 [T, C]
 TTGCATATCCAACAAGTGAATGAGTGAGTGAGTGAGTGAGTGAAATGAAATCTC
 CACTGACTCTGAGGCAACTGAGATGAGGAGATATTAAATACTCAAGGTGTCATTAT
 TGGACACACATATGACTAGGACTTTGTACTTCATACTCTCATTACAATTCTTA
 AAAGACTACTTCCAAAGTATACAAATTGATTGAAATCTGCTTGGGCCAGGC
 ACGGTGGCTCATGCCATGAACTTGGAGGCTGAGGCGTGGGATCACGAGA

75749
 TGCCAAACATCAGGCCAACATGAAACCCCTTGAGAGATTGCCCTATAAACTGTTATTGGAGCAG

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CATCTGTTGCCAGGGTAAATTCAGTCATATGGACTGGCCCTGGAGTCTCAGATGG
 TGCAGCCCTTCCCAGAGGAAGACTTCATGGGGTCAAATGCTGTAAGAAGTTTGT
 TTGTCGTGTCGCCATCACACATAGAGATAAGAACCTGGTATTGGAAATCAGACAGA
 TTTTGTGTATTACCTGTCGCTACAACATTGCCCAACTCGGTGACTTC
 [T, C]
 ACAACAATCTTGTTATTATCCTTATGGATCCCTGGCCAAGAATTCACATGGAGCAC
 AATGGAGAAGGATGGAAGACCTGAAAACACTAACACTGAAATCATCTAAAGACTTATTACTC
 ATGAGCTGTGGAGCTGTCAGCTGCAACACTTACACAAGGCCTCTGCATTGGCCT
 GAACCTCCTCACACATGGTACTGGGCTTAAGGATTGGCTAGATAAAGTCATGGCAG
 AGACCAACTCATGGAAGCTATGCAACATGGAAGATGAATGGCCAGGATGAAGACAGAG

77275
 TTTCTATATGAAATCATACTATTTGTGGCCTTGTGACTGGCTCTTCACCTAGC
 ATAATGTTCAAGGTTATTGTCATTGCTTACCATGTTACGTGCTTCATCCCTTATGGT
 ATATCCATAAAATGAAATATTAGGACTATAGTATTTCATTGGATATACCATATT
 TTGTTTATCATTATTAGTGTAGACATTGAGTTGTTTACTTTGACTACTATG
 ACTAATGCTGCTATGAAATTCTTTACAAGTTGTCATGGCCATATGTTTCACTTT
 [C, T]
 TTGAGTGTGACCTAGGGTAAATTGCTGTTATGAGTAACCTATGTTAGCCTT
 TGAGGAACCTGCCAACACTGTTTCAAAGTGTGACCAGTTACATTCTCACAGCAAT
 ATATGAGGTTCAATTCTCACATCCTTACCAACACTGTTATGTCGTTTCA
 TTATAGTCATTCTGGGTATGAAAGTGGTACTCATGTTGTTGATTACATTGTA
 ACAGCTGATGGGTGTGAACATTTTCTATTGGTATTGTTGATATCTTCTT

77282
 TATATGAAATCATACTATTTGTGGCCTTGTGACTGGCTCTTCACCTAGCATAATGT
 TTCAAGGTTATTGTCATTGCTTACCATGTTACGTGCTTCATCCCTTATGGTATATCCA
 TAAAATGAAATATTAGGACTATAGTATTTCATTGGATATACCATATTGTTA
 TCCATTATTAGTGTAGACATTGAGTTGTTTACTTTGACTACTATGACTAAATG
 CTGCTATGAAATTCTTTACAAGTTGTCATGGCCATATGTTCATTTCTGAGT
 [G, A]
 TGACCTAGTGGTAAATTGCTGTTATGAGTAACCTATGTTAGCCTTGGAGGAA
 CTGCCAACACTGTTTCAAAGTGTGACCAGTTACATTCTCACAGCAATATGAG
 GGTTCAATTCTCACATCCTTACCAACACTGTTATGTCGTTTCAATTAGT
 CATTCTGGGTATGAAAGTGGTACTCATGTTGTTGATTACATTGTAACGACTG
 ATGGGTGTGAACATTTTCTATTGGTATTGTTGATATCTTGGAGAA

81236
 TTGTTGCTTAGTACTTCTTCTTAAGGTTGGCAAGAGCATCTGCTGGTAACCTG
 GCTCAGTGTGTTAGGTTTGTATATGTTGGTTCTATTCTGGCATGAACT
 ATTAAGATTCTCAGATAGGATAACACTTACAGCCTTCTGTTATATATTAGCTC
 TTACGGACCTCATAAACCTAAAGAGGTGCAGAGGAAAGTGCACATTCTCATTTACA
 ACTGGGAAGCAGAGGCCAGAAAAGTGTACTTAACCTTCCAAGTCACAAATGTTAT
 [T, C]
 AGAGCTGCAACCAGAGCTAAGGTTGAGGTTATGAAACCTAGGTTACTTCGGTTAAT
 AGGCTAGTGCAGCTTACCTACTAATTAAAAATGACAACATTAGGATTAAACC
 AGATGGTCTTCTGTTGTCACACTCTTACCCACTGTCAGCAATGGCCATCAGATAA
 TCCACACTGATTGTCATGAAAGGAAATATTCTGTTCTGTTCAAGCTAGGCTGCA
 AAACCGAGAGCAATTCTCATCCCCGAGATGCAATTGCTCAAGCACCTATCTACTTTC

82536
 GCCTGAATGAGTAATTCTCTGGATTACTAATATCAAAGTCCATTGTTATCTGATTGA
 GATGAGGAAAGAATGCAAGGATGGAGCAGGGAAACCAGTCCTCACACTACATGGTTACTC
 CAGGGATTCTCAACGTTAGCACTACCTATGTTGCACAGGGTTAGTCTTGGGG
 GGCTGTCCTGCACAATGGAGGATGTTCATCAGTATCCTGGCCTCATCATTATAAGAT
 GCCAGCAGCAAACCAACCTCTCCAAGTCTGATGACCAAAACTATATCCAGATATTG
 [C, T]
 GACTGGGGGCACTGCCCCCAAGTGGAGACTCAATAACACAGTACATTGTCATGAT
 GGGACATGTTAGGCTCACGGGGTAGCCAGTGACAGGCAGGAGACAGGAGTGGGGATT
 TTTTCTGTAAGGCCCCAAGTGCACAAATTTCATTAGGACTGTCGCTCCAACACTAA
 CTCTGCCATGTTAGCTGAAAGCAGCAAAGACAACACATAATGAAACATGTCAGGCAA
 ACTATTATGGGCTGAAATTGAAATTTCATATAATTCTGTCAGTAAGTAACT

82954
 TTTTTCTGTAAGGCCCCAAGTAGCAAATTTAGGCACTGTCGCTCCAACACT
 AAACCTGCCCCATGTCATGTTAGGCAAGCAGCCAAAGACAACACATAATGACATGTCAGC
 AAAACTATTATGGGCTGAAATTGAAATTTCATATAATTCTGTCAGTAAGTAA
 TCTTTAAATTATTACCAACCTAAAGTAAACTATACATGAGTCCTACAA
 AATCAGGTGGTGGCTAGACTGGCCATGAGCCATAGTTCTGACCTTGGACTAAGA
 [A, C]
 ATACATGAAAGCCGTAACCTCATATTTCCTAACGATAAAACATGGATAAATGACT
 TCTCTAACACCATCAAATTACATATAAATTAGGAAAGCATATTATTATTAA
 TGAGCATTGCTATATTGGAAATGGACCCAGCCAAAGTGAATTAGGAGATAAAACAT
 TATATTCAAAGTTATCTGCTTCCCATGGCTGTTGACCCATGCTCAGGTCCCCAG
 AGGCCTCATTCCTGCCATTTCCTGCTTTAGGCTACCTGGTAGGAAACTT

FIGURE 3, page 91 of 122

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| 87371 | GAGTTGTAGGTGCACTCTGTTCTGGTTCTTGCAGTGTAAATGCCAGAACGTAGGTTAG AATTCTCCTGGATGTAAGGATCACCGCCACCCAGGTGGCAGTTAGACAAGGGAGTGA TGGATTGGGATCCTTGTCACCTTGATACACAGTCTTAGACACACAACCTAGGA CATGGAAAAGAATTACATTACATCCTGAGCCCCAGCTACTGTTACCAATTCAAATTAGGAC AACATATTGATTAAGATAACAGTAGTTATGCTACCTAAGAACCTGAATACCTA [C, G] TTTTTATTCTACTTCTACCGCTGTTAGTAACCTATTCTGATCCACCATTTAACCT GTGAGCCTCAGTTCTCCATCTTAAGACAGTGTGATGATAATGACAGTATCTGAGAACAG CTTAACCTGAACAAATGAGAAAAACTAACACAAACATAGAATTAAAGTATGAATTCT GAGGTAGTTATACATGTTTAAGAGCTTAGAGAAAAGGAAAAACATAAGTATCCTAA GGAGATTAGGAAATGTTCTGGGAGGTTGGAAAGCAGCTAACCTGAAGAACATAGGA |
| 87392 | CTCTGGTTCTTGCACTGTAAATGGCAGAACGTAGGTTAGAATTCTCTGGATGTAAGGA TCACCAGCCCACCCAGGTGGCAGTTAGACAAGGGAGTGTGGATTGGGATGCTTGTGT GACCTGTATAACACAGTTCTAGACACAAACCTAGGACATGGAAAAGAATTACATTCA TCCGTAGCCCCAGCTACTGTTACCAATTAGGACACATATTGATTAAGATAACAG GTAGTTATGCTACCTAACAGAACCTGAATACCTACTTTTATTCTACTTCA [G, A] CTTGTAGTAACCTATTCTGATCCACCATTTAACCTCTGTGAGCCTCAGTTCTCCATC TTAAAGACAGTGTGATAATGACAGTATCTGAGAACAGCTTAACAGTAAATGAGA AAAACAAACAAACATAGAATTAAAGTATGAATTCTGAGGTTAGTTATACATGTT TAAGAGCTTAGAGAAAAGGAAAAACATAAGTATCCTAAGGAGATTAGGAAATGTTCT GGGGAGGTTGGAAAGCAGCTAACCTGAAGAACATAGGATGTATTTGAAACACTGGGAGA |
| 87423 | GAGGTAGAATTCTCCTGGATGTAAGGATCACCGCCACCCAGGTGGCAGTTAGACAA GGGAGTGTGATTGGGATGCTTGTGTGACCTTGATACACAGTTCTTAGACACAA CCCTAGGACATGGAAAAGAATTACATTACATCCTGAGCCCCAGCTACTGTTACCAATTCAA ATTAGGACACATATTGATTAAGATAACAGGTAGTTATGCTACCCCTAACAGAACCTGAATCTG AATACACTTTTATTCTACTCTACCGCTGTTACTAACCTATTCTGATCCACCAT [T, C] TAACCTCTGTGAGCCTCAGTTCTCCATCTTAAGACAGTGTGATAATGACAGTATCTG TAGAACAGCTTAACCTGAAACTAAATGAGAAAACAAACACATAGAATTAAAGTAT GAATTCTGAGGTTAGTTATACATGTTTAAGAGCTTAGAGAAAAGGAAAACATAAG TATCTAACGGAGATTAGGAAATGTTCTGGGAGGTTGGAAAGCAGCTAACCTGAA GAATAGGATGTATTTGAAACACTGGGAGAAGGAGATGAGAAGGATGTGAAGTGGAGGCAAT |
| 87627 | TACAGGTAGTTATGCTACCTAACAGAACCTGAATACCTACTTTTATTCTACTT CTACCGCTTGTAGTAACCTATTCTGATCCACCATTTAACCTCTGTGAGCCTCAGTT TCCATCTTAAGACAGTGTGATAATGACAGTATCTGAGAACAGCTTAACCTAAC ATGAGAAAACAAACACATAGAATTAAAGTATGAATTCTGAGGTTAGTTATAC ATGTTTAAGGCTTAGAGAAAAGGAAAACATAAGTATCCTAACGGAGATTAGGAAATG [T, C] TTCTGGGGAGGTTGGAAAGCAGCTAACCTGAAAGAACATAGGATGTATTTGAAACACTG GGAGAAGAGATGAGAAGGATGTGAAGTGGAGGCAATAGCCTGCACTATCCAGAGACAGT TCTGATTGCTTAATGCTATGGCTCTACTTCAGTTAACAAATTCCAATCTTGA TACCTTCATTCAACAGTCTTCTATTCTAACATTCTAACGGAGATTAGGAAATGTTCC GGAGGAGTGGCCTACTTGTGAAATAATCACATCACAGAACCTCTTCTCTT GG |
| 87637 | TATGCTACCTAACAGAACCTGAATACCTACTTTTATTCTACTTCTACCGCTG TTAGTAACCTATTCTGATCCACCATTTAACCTCTGTGAGCCTCAGTTCTCCATCTTA AGACAGTGTGATAATGACAGTATCTGAGAACAGCTTAACCTGAACAAATGAGAAAAA CTAAACAAACACATAGAATTAAAGTATGAATTCTGAGGTTAGTTATACATGTTTAAG AGCTTAGAGAAAAGGAAAACATAAGTATCCTAACGGAGATTAGGAAATGTTCTGG [G, A] AGGGTGGAAAGCAGCTAACCTGAAAGAACATAGGATGTATTTGAAACACTGGGAGAAGAGA TGAGAAGGATGTGAAGTGGAGGCAATAGCCTGCACTATCCAGAGACAGTTCTGATTGTC CTATGCTATGGCTCTACTTCAGTTAACAAATTCCAATCTTGTGATACCTCATT AACAGCTTCTATTCTAACATTCTAACGGAGATTAGGAAAGAGATGAGAACAGTGG GCCTACTTGTGAAATAATCACATCACAGAACCTCTTCTCTTGTAAAAGT |
| 87777 | GTATCTGTAGAACAGCTTAACCTGAACTAAATGAGAAAACATAACAAACACATAGAAT TAAGTATGAATTCTGAGGTTAGTTATACATGTTAACAGCTTAGAGAAAAGGAAAAA ACATAAGTATCCTAACGGAGATTAGGAAATGTTCTGGGAGGTTGGAAAGCAGCTAAG CCTTGAAAGAACATAGGATGTATTTGAAACACTGGGAGAAGAGATGAGAACAGTGG AGGAATAGCCTGCACTATCCAGAGAACAGTTCTGATTGCTTAATGCTATGGCTCT [A, G] CTTCAGTTAACGAAATATTCCAATCTTGATACCTCATTCAACAGTCCTTCTATT CTAATTCTATTCTGAAATTGTTCCCTGCGGAGGAGTGGCCTACTTGTGAAATAAT CACATCACAGATACTCTTTCTCTTTGTTAAAGTCTGTTAAATATATATT GTTAAAAAATTAAAGGTTATCTCCAGATAATTCCCCAAATGAGTAGGCTAGGCTTAAAT |

FIGURE 3, page 93 of 122

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| | CATATTATGTTCCCTTCTTGCCTTCACGGCAAGTATACTAATGATCATAATC |
| 87810 | AGAAAAAACTAACAAAACATAGAATTAAGTATGAATTTCGAGGTTAGTTATAACATG TTTAAGAGCTTAGAGAAAAGGAAAAAACATAAGTATCCTAAGGAGATTAGGAAATGTT CCTGGGGAGGTTGAAAGCAGCTAACGGCTTAGAAGAATAGGATGTATTGAAACACTGGG AGAAGAGATGAGAAGGTAGTGAAGTGGAGGCAATAGCCTGCACTATCCAGAGACAGTT TGATTGTCCTAATGCTATGGCTCTACTTCAGTTAAGAAATATTCCAATCTTGATA [C, T] CTTCATTCAACAGTCTTCTATTTCTAATTCATTCCTGAAATTGTTCCCTGCAGGA GGAGTGGGCCACTGTGAAATAATCACATCACAGATACTCTTCTCTTTGT TAAAAGTTCTGTTAAAATATATATTGTTAAAATAAAGGTTATCAGATAATT CCCAAATGAGTAGGCTTAGGTTAATCATATTATGTTCCCTCTTGCTCTCACT TGCCAAGTTACTAATGATCATAATCTCTATGTGTTGGACTTTACAGTGTGTA |
| 89812 | AACCCAGTCTCTACTAAAATACAACAAATTAGCTGAGCATCATGGTGCCTGTAAT TCTAGCTACTCGGGAGGCTGAGGACATGAAATCGCTTGAACCTAGGAGGAGAGGTG AGTGAGCCAAGTCACACATTGCGCCCCAGCCTGAGCAGCAGAGAGACTCTGCTAA AAAAAAAAAAAAAAATGAAAGTAAAGAAGAAAGAAAGAAAAGGAGAAAG AAAACACGATTCTGAAAGAAAAAGCAATACTGAGAGAAGAAACATGAAGGTATT [G, A] TTTAAATAGTGGCTCAGTGAATCCCTTACTGAGTAAAAGTGCATTAAAGCTAGATT CAATGCTGGATGGTATTCTGCTACAAAACATTGGAGAATTCTAGCCAAAAGGAA TAATTGTCATGATTGAAAATGGAAGGACAACCAGGGTAGCTGGAAATGTTATGGC AAGGGAGAGTGTAGAAGATTAAATCAGGAAAACAGAGAAAAGTAACAGATGAGGCAGT GCTGACAGGCCATGAAAAGAAGAGTGACTTTATTAAAGTCATGAGAAGCCACTGGA |
| 90137 | CCTTAAGTGAAGTAAAGTGCACATTAAAGCTAGATTCAATGCTGGATGGTATTCTGCTA CAAACAAATTGGAGAATTCTAGCAGGAAATAATTGTCATGATTGAAAAAA TGGAGGACAACCAGGGTAGCTGAATGTTATGCAAGGGAGAGGTGATAGAAGATT AATCAGGAAAACAGGAAAGTAACAGATGAGGAGCTGCTTGAAGGCCATGAAAAGA GTGACTTTATTAAAGTCATGAGAAGCCACTGGAAGGTACAAGTAGAAAGGGATGT [G, A] TCTCATCTGTTTAAGAATTGGTCCAGTCGGCTGGCGCGGTGGCTCATGCTGTAATC CCAGCACTTGGGAGCCAAGGGGGTAGCTGGATCACGAGGTCAAGGAAATTGAGACCAGCCTG GCCAGCATGGTAAACCCGCTTTACTAAAATACAAAAAATTAGCTGGGATGGTGCAG GTGCACTGTAGTCTAGTACTGGGAGGCTGAGGCAAGGAAATTGCTGAACCCGCA GGTGGAGATTGCACTGAGCGAGATGACCAATTGCACTCCAGCTGGGTGACAGAGGG [G, A] |
| 90400 | AGAAGCCACTGGAAGGTACAAGTAGAAAGGGATGTTCTCATCTGTTTAAGAATTG GTCCAGTCGGCTGGCGCGGTGGCTCATGCTGTAATCCAGCACTTGGGAGCCAAGG CGGGTGGATCACGAGGTCAAGGAAATTGAGACCAGCCTGGCAGCATGGTGAACCCCGTC TTTACTAAAATACAAAAAATTAGCTGGGATGGTGGCGTGACACTGTAGTCTAGCTAC TTGGGAGGCTGAGGCAAGGAAATTGCTGAACCCGCCAGGTGGAGATTGCACTGAGCG [G, A] ATAGCACCATTGCACTCCAGCTGGGTGACAGAGGGAGACTCCATCTCAAAATAAA ATAAATAAATAAAAGAATTTCGCCCAGTCAGTGAACCTTTGTGACTCCCTTTCTC CTGAAAACAAGGATTAAACTACTGATTGCTTCAAGGAGGTTGTGAGTGTCA TGTCATTATAACTTTGCTCAAGTGTGCTTGAATAATTGAACTGAATTGTTCA TAACAATATGAAAATGCTTATAAACTGTAAGGGCCATGCAAGTATAAGTATTACCAA |
| 92359 | TCAAGTGTCTGCCTTAGAGCTAACAGTTCTCTTGGTGAATGGTTAAAATACCCATCC AGTACATGTCCTAAATGGACATGAGGTTCTCTGGGATAAGGATGAGAAGATACTTG TATTGTAACATCTACTCAGATGCAAGGATGTTCTCATCTCAATTAAATTACACTCTGGT CCAGTTCTGGGGGTCACTGCAAGAGCTAGTTCAAGGCTGCAACATCTCATTAGAAG CTGAAATTGGATTCAAGGAAGGGAGCATGGAGTGGTGAGAGGCCACTGCTGCTCA [A, G] GTTCTGCTGCTATCTGTATTCAAGAGAGGATCCTGGTACCTTAGCAGTGTGCTCAGTG GGACGTCTGACTTGTGATGGCAGTGTCAACATTCTAATAGGGCAGGCCAGAGTG GGTATGAGTTGAAAGACATCTTATGACAGCTTTCTCAAAGATGTTCAAGAGATA ACCCCTTAGAAATAACGAAGGTAGTTATGCAATTCTAGGAAACCCAGCGGCTTACGTA GCAGCTCACTCGAAGTCTGGCATGCGGACGGCTTCTACTGTCCGTTTGCCTCCC |
| 92555 | CAGCTGCAGAGAAAGCTAGTTCAAGGCTGCAACATCTCATTAGAAGCTGAAATTGGATCA GGAAGAGGAGCATGGAGTGGTGAGAGGCCACTGTCTGCTCAAGTTCCTGCTGCTAC TGTATTCAAGAGAGGATCCTGGTACCTTAGCAGTGTGCTCAGTGGGACGCTCTGACTT TGATGTTGCACTGTCACATTCTAATAGGGCAGCAGCCAGATGGGTATGAGTTGGA AAGACATCTTATGACAGTTTCTAAAGATGTTCAAGAGATAACCCCTTAGAAATAA [-, T, C] GAAGGTAGTTATGCAATTCTAGGAAACCCAGCGGCTTACGTAGCAGCTCACTCGAAG TCTGGCATGCGGACGGCTTCTACTGTCCGTTTGCCTCCCTGCACTGTGAGAA ATCATCACTGTGACAGTAACACAGTATTGTTAGTTACATTGACAGCAATGGTAAA |

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| | AATCAGATAATTAAATAAAGCCTTGAGCATAATCCATGATGACTGAAAGTAATGATTAA [A, G] TAATAGTCTATTAGACTATACAGCCTACTCACTATCTCATTCTTATCTAGTATTTACT AGCTAGTTAGGCCTATTCTATTGCTTAGAACAACTCTTCGATCTATCCAAAATGT ATAACCCTGGTCACCAGATCAATATCTCAGCTCCTCCTTCAGGTAATATATTG CATTTGCTTCATAACACCTAATACAATGCATGAAGCATGCTTTAATAAACATTCTGG ATGGATGAATAAATAATGAATAAAGAAATGAAGTAAAGAAAGTCAATTATATTAT |
| 100873 | AGGGAAAAAGAGAACGAATCAAATATCTGGAAATAAATTCTGTTCTCTGAGC TTTGATTGTTATAAGCTGGGGAGCATGGCTTACCAATTATTTAGTCTCACAGTA TGTAAACATCATCACACATAAGGTTATGAACACTTATACGCTGGAGGAAGGATGGT ATAGAAATTAAATATTATATATGATCCTCCAGGAAGAAAAAGAAGCAATATCTAT TCTGTGAGGTGATCAATTGGATCACTCTAATGGAAGTGCCTGGAGCAGTTGGTTAT [T, C] TCTCAATGTGAATTAAATTATACATTCAAGCTCCTGATGGACTTTCTATTAA TTAAGTACATTGCAAATTCAACCTTAAACACTCAACAAATTGTTCCCACACTTG CTTGAGAATTGCAATTAGATATAAATTATTATAAAAGGGTATGTTAGAAACTTC TCATACTGAAATCGGCCACCCAGCAACTTTCTTAGGATCAAGTGCCTAACATGTG TGCCTGTTGCTGTGATTGGTGGTTTATTTGATTTCATAGAAAATAATAAAT |
| 102673 | GAAGAATACCACCTTTTCTACCCCTTAAAGTGGAGAAGATTATTGTAAGAGTGT GAAATGGCTAACGATTGGCCCTTAAATGGGGTATTGTTAATTGTAAGCACTGCAA AGTGGGGTGCATATTGTCCTGTTACTCAGTGTCAAAGATTTAGTTCCTTGTGAC CCAGTCTAGTTCAAGAGTCATCAAACAGAGATCACAAATTAAATTGTTTCAG AATGAATCTGAAGAGAGCGAAGAGTGTGAGTGGAGAAGTCAGCTAGATCATCCTGCTAT [C, T] TATGCAGACTCCTCCCATAATTTCACCCAACTAGTTATGCCTAATTACCAAGG AATTCTCCTGACCTTAAATTGCTGCTTAGGGCATGAAATTATGAGTGTAAATT TACAGACCATTCTAACCTTAAACCAACTTCAACGATATTCTAACAGAATGGCCAG TGTGAGGACTAAATTGTCACGCAGATTGCTAGACATTCAAGATAATCCATTG AGTATCGCACGAAACACATCCCTACCAACTAGGTAGCTAGATCCTCATTTC |
| 102807 | TTGTGGCTTTGACTCAGTGTCAAAGATTAGTTCTTGCACCTAGCTTAT TCAAGACTCATCAAACAGAGATACACAATTAAATTGTTCTGCAAGATGAATCTGAA GAGCGAGAGTGTGAGTGGAGAAGTCAGCTAGATCATCTTGTCTATCTGAGACTCT TCCCTAAATTTCACCCAACTAGTTATGCCTAATTACCAAGGAAATTCTTCTG CCTTTAAATTGCTGCTTAGGGCATGAAATTATGAGTGTAAATTACGACCATTCT [T, A] AACTTTCAAAACCACTTCAACGATATTCTAACAGAAATGGCCAGTGTGAGC TAATTGTCACGCACATTGCTAGACATTCAAGATACTCCATTGAGTATCGCACGAAA ACCTGCACCAACACATCCCTACCAACTAGGTAGCTAGATCCTCACAGGTATTCT TACATAAAATTCCCTGCATAGCAGTACAGTGTAGGCAATAATTATTCTTGT TATGCCTTTACTCAACTGTGAGCTCCTAGAGGACATAGGTAAAATCTGTTGTT CAG |
| 102938 | TGAGTGGAGAAGTCAGCTAGATCATCCTGCTATCTATGCAAGACTCCTCC TCCTCCAACTAGTTATGCCTAATTATACCAAGGAATTCTCCTGACCTTTAATTG CCTGCTTAGGGCATGAAATTATGAGTGTAAATTACGACCCATTCTAACCTTCAA AACCATTCACAGATATTCTAACAGAAATGGCCAGTGTGAGGACTAATTGTC CGCAGATTGCTAGACATTCAAGATACTCCATTGAGTATCGCACGAAACCTGACCA [A, G] CACATCCCTACCAACTAGGTAGCTCATTCAACAGGTATTCTAACATACATAAAATT CCCCCTGCATAGCAGTACAGTGTACATGTAGGCAATAATTATTCTGTATATGC ACTCACTGTGAGCTCTAGAGGACATAGGTAAATTCTGTTGTTACTGCTGAATT TAGAACCCAACATAGTACAGCACCAAGAACACTCAATAGAAGTGGATGAAC AGAACAAATGGTTGGCTAGGAAGGGTTGGGACCATAGAACACTGTATTAAAGAAG |
| 104061 | GAGAGTGTCCCTGAAACTAGTAGATGGCTCTAGATCCATTGAAATTCTGCC TGACAGCATAGATGAATTCTACTACTTCCAGCTCTAGAGTTAGCAGAGTC TGGGAGTCAGGAGACCCAGATTCTAGTCCCTGCTGTGCCGTGGCTCTTGTG GCATATCACTTATCTCTGATCTCTCAGTTCTCTGTAAAAGGAGATTTC ATCACTAGTTGGTAGGACAAGGACATTAAATTATTTCTCCCTAAATAATGC [C, T] ATAACTTACAAATCAAATGTTACTTCAGTCATAAGAACAAAATTCAACATT CTCTCCCTTCTATCTGGATTCCAGCTCTACAGGGATCACTTTAGGCTCTT GTTCTCTGATATTACCTTGTATCTCTGTATTGCTGTTCTGGGCTGCTA TAACAAATACTATAGACTGGGTGGCTTAAACAAAGATGTTATTCTCAG CTGGGAAGTACAAGATCAATGTGAGGCCATTGGGTCTGGCAAAGAC CTGCTTCTAG |
| 107552 | TATAATATAATATATATAATTAAATATATAATTAAATGTAACAGGT AGAAATAGTCTTGTCTTACTAACAACAAAGTGCCTAGACACAGAAC GCACATAGGATTGGAACACTAAACTCTTGGCTAATTAGTGC TTTAAATAT |

FIGURE 3, page 96 of 122

TCAGTCATTTCTAAATTCCCAAGTGTCACTGTCATGGCATGAGAGGTACATAGATGCATAAAG
 CTCCTCAAGGACTGTAACCTATTAGGAATAACACATATAGACAATAAAAAAAA
 [-, A]
 CAGGTCAACACTGTCACTAAGTAGCAAATTATGTCATTTCATAGTTAAGAGTGACAGA
 TTTCATGGCCTGAGTGTCAATTGGATGCATCCCATCATGGCTGGCATCCCAGAAAAGGC
 TGGGAATGATTAGACAGAGTGAATGAGAGAGTCTTTAACACACAGGGTATAACAAG
 TATGCATCTATTCTTTGGAATGTTAAAATTATCAAATCAGAAGCATCTAAAATTC
 ACTTTCTTGAAAATGTATGCAAGATCCAGCCACTTTATTTGTCATATTGGTT

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 CATGCCATTCTCTGCCTCAGCCTCCCGAGCAGCTGGAACTGCAAGGCCGCCACACG
 CCTGGCTAGTTTTGTTAGTTAGTAGAGATGGGGTTCACCCCTGTAGCCAGGATGG
 TCTCGATCTCTGACCTCATGATCCACCCACCTCAGCCTGCCAAAGTGTGGGATTACAG
 GCATGAGCCACTGTAACCGGCCAGGGCTGTTGATTTATAATTTCCTCTTTGGC
 TGATTGAAGTCCATTGCTAATTCTAGTTGACACTTTATTACCTCAACTAGATTATT
 [T, C]
 GTCAGAAAGTTACTGAGCATCTCTAGGCTAACGACTTTAGAAAGTATGAAAGAAGTT
 TAATTCAAAACTTATCCTAAAGATCACACATCTGCTGATGGCACTAGACAGTACAG
 CAATCCCTGATATCACACAGGGTTGGTACAGGACTCTACAGATACCAACATCTAGG
 TAGTTAAAGTCCTTATAACATGGCGTGGTGGCACAATACTAGGCACATCCTC
 TCACATACTTAAATCATCTATATTACTTATAACCTAACATGAAATACTATG
110884
 GGTTCACCTGTTAGCCAGGATGGCTCGATCTGCACCTCATGATCCACCCACCTCA
 GCCTGCCAAAGTGTGGATTACAGGATGACCCACTGTACCCGCCAGGGCTGTGATT
 TTATATAATTCTCTCTTTGGCTGATTGAAAGTCCATTGCTAATTCTAGTTGACACT
 TTTATTACCTCAACTAGATTATTGGTCCAGAAAGTTACTGAGCATCTCTAGGCTA
 GCACTTGAAAGTATGAAAGTAAATTCAACATACTTACCTAAAGATCACAAATC
 [T, C]
 TGCTGATGGCAGCTTACAGACTACAGCAATCCCTGATATCCACAGGGTTGGTACAGG
 ACTCCTACAGATACCAACATCTAGGTATGTTAAGTCCTTATAACATGGCGTGGTGT
 TTGACACATAACCTAGGCACATCTCCTACATACTTAAATCATCTCTATTACTTAA
 TACCTAACATGAAATAACTATGAAATAGCTGCCACACTTATTATTGGTGTAA
 TGTGTTAAATTATTAAATTTCATCTGCAAGTGTGAATCTGCAAACGTAGAAC

115075
 AGGCTGCATAGTATTCCATGGTGTATATGTCACATTTCTTAATCCAGTCTATCATG
 TTGGACATTGGGTTGGTCCAAGTCTTGTCTATTGTGAATAGTGCACAAATAACATAA
 CGTGTGCATGTCTTTATAGCAGCATGATTATAGCCCTTGGCTATATACCCAGTAAT
 GGGATGGCTGGTCAATGGTATTCTAGTCTAGATCCCTGAGGAATGCCACATGTGC
 CCTAAACTTAAAGTATAATAATTAAAAAAACAGTACCTAGTATTGAGTGC
 [C, T]
 TAAGGTAGTAAAGGCTTGAGAAGCTGGAGCCATTTCATACCGAATATGTAATATCGA
 CATCTCTGCTCTAGAAGACTAGGACACTCTGGAAAAGTGTCTGTTATCTTATTAGG
 AGTAGTGGCTCACAATGTGGTGTAGTTAAGGACAGGCTGAGTGAACAAGAA
 GGGACTGATCATGTTGGCAGTGTGCCACCCCTAGCTACGTTCTGGCATGGACT
 AATTGTCAGCCTCAATTCTCATCTGTGACAGGTCAAATACTCCCATACCACAGG

115286
 CTAGATCCCTGAGGAATGCCACATGTGCCCTAAACTTAAAGTATAATAATTAAAA
 AAAAACAGTCTACAGTATTGAGTGCCTAAGGTAGTAAAGGCTTGAGAAGCTGGAGC
 CTATTTCTACCCAAATGTAAATATCGACATCTCTGCTCTAGAAGACTTAGGACACT
 TGGAAAAGTGTGTATATCTTATTAGGAGTAGTGGCTCACCATTGTTGTGTCATGG
 TTAGTAAAGGACAGGCTGAGTGAACAAGAAGGACTGATCATGTCCTGCCAGTGT
 [C, T]
 GCCTAGCTACGTTGGCAGGCTAATTGTCACCTCTGTCATCTGTGTG
 ACAGGTCCAATAATTCCCCATACCAACAGGGATGTTGATGATTAATGATAAGCAGAGA
 TTTAGTACAGGATTGGATATAGTAAGCTCTCCATAATGTAATCTTACATAC
 ATATACATGTTACATACCTATATATACATACATACATTGATCTAGTTATAAT
 CTCCAATATGCCCTGGAGCTCAGAATGAGCTTATTCATTTGTAATGTTACTATC

121154
 GAGTATTGTCACAAATTACATAGTCTTCATTAACACAAGAGGAAGTCCTGTCCTGATC
 TTGAAAAAAATGATAGATATGTCACAAATAGGCTGAAACAAGGCAGTGTGTTCTCC
 ATATGAGGAATACTCTCCACATGTCAGCTAGCCTCTCTCATCACCTAGGCC
 AGTGCACCTGGCTTGGATTAGACTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT
 GATGGAGTCTGCTGTCACCCAGGCTGGAGTGCAGTGGAGCAATCTGGCTACTGCA
 [G, A]
 GCTCCACCTCCGGTTCAGGTCTTCTCTGCCTCAGCCTCCGAGTAGCTGGGATTAC
 ATGGCCACCCACACACCCAGCTAATTGTTAGTTAGAGAGACGGGTTTACCAT
 GTTAGCCAGGATGGTCTGATCTCTGACCTTGTGATCTGCCGGCCTGCCACCAAG
 TGCTGGGATTACAGGCTGAGGCCACCGAGCCCCAGACTCTTCTTAATATTCCA
 ATAAGGTACAATTGATCATCTAGTTCTTCTCTAATCTGGCATGATATGGTGG

121250
 AACAAAGGCACTGATTCTCCCTCATATGAGGAATACATTCTCCACATGTCCAGCTAG
 CCTCCCTCTCATCACCTAGCCAGTGCACCTGGCATTGGGATTAGACTCTTCT

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TTTTTTTTTTTTTGAGATGGAGTCTTGCTCTGTACCCAGGCTGGAGTGCA
 GTGGAGCAATCTGGCTCACTGCAGGCTCACCTCCGGGTCAAGTCATCTCCTGCCT
 CAGCCTCCGAGTAGCTGGATTACATGCCACCACACCCAGCTAATTTGTATT
 [T, G]
 TTAGTAGAGACGAGGTTTACCATGTTAGCCAGGATGGCTCGATCTCTGACCTTGTA
 TCTGCCGGCTCGGCCCTCCAAAGTGCCTGGGATTACAGGCATGAGCCACCGAGCCCAGCC
 CAGACTCTTTCTAAATATCACAAGTACAATTGATCATCCTAGGTTCTTCT
 CTAAGCTGGCATGATATGGTGGTAATGGAGGTTAACATTATTATTGTAGAG
 AAGAACCTCAAAGCCCCTATGGGTTGGCATATTCTACTGTCTGCATCCCTGGAAGAT

124478 TATTCCTTATCAGAAAAGAACATTGCAATACTCGTAAGGGACTTCTTCACTTCCCATT
 CCACTGAAGAACATTCATTTAGTACCTTACCCAGCATTGCAAGCTCGTAGGATAC
 CCAGCCACACATACCCATATCAGCAGCAAGTCTGAGAGCCAGCGGCAGTATTAGCATTA
 TAAAGTGTTCAGAGTTGGACAGTGTGTGCTTCCCCCTCATAAATCCTAAATCTTAG
 GCTCACTCAGCTGGAAAAAAAAGAACATGGGTTGAAGAACACTTATTATTTT
 [G, T]
 ATTTCTCTGCCTTGTGCTCTTTGACTCGCATCTGAATATCAAGGCAAGAAGTGC
 TCAAGTCTCTGGCTCTGGAAAGGCTGGAACCAATTGGTATTCTGGAGTCGGTCTT
 TTGGACTAAAGCTCTTTCTTTCTCCCTCCCCAATAAAATTCTGTTCCAGGGAGTA
 CTTTCAGTCACTCTTCTAATGAAATTCTGTTGATTCCACTGAACGGCTCTGA
 AAGGAGACACTGAACCATGCCTCCACAAGCATTCAATTCTCAACACAGCTTCAGGC

124841 AAGTTCTCTGGGCTGGAAAGGCTGGAACCAATTGGTATTCTGGAGTCGGCTTT
 GGACTAAAGCTCTTTCTTCTCCCTCCCCAATAAAATTCTGTTCCAGGGAGTACT
 TTCTCAGTCACTCTTCTAATGAAATTCTGTTGATTCCACTGAACGGCTCTGA
 GGAGACACTGAACCATGCCTCCACAAGCATTCAATTCTCAACACAGCTTCAGGCAG
 GAGCAGTCCAGATGCAATTATCCAGTAATCATGCATTAAACAAAATGATTGATG
 [C, T]
 AGCATTTCCTCCCTCTATCATTCCAGTCCATTAGTCTTATTGTTCCATGGTT
 GGTTCTGCCAAATCAGTGAATATACAAATACTGCATAAGTCATGCACATCTACACAC
 ACATACATGAAATAGGACTGGGCTGTATCTGAGTTGAATATTCAACATTTTATTC
 GGTTCTATGTCCTCACTGAAGTTTAGCCGCTCTTCTTCTACTTCCCTCT
 CCTCTTTTCCCTCTTCTCTTCTTATAGTCTATTAAAGTGGTCAAAAGTAA

124842 AGTTCTCTGGGCTGGAAAGGCTGGAACCAATTGGTATTCTGGAGTCGGCTTT
 GACTAAAGCTCTTTCTTCTCCCTCCCCAATAAAATTCTGTTCCAGGGAGTACT
 TCTCAGTCACTCTTCTAATGAAATTCTGTTGATTCCACTGAACGGCTCTGA
 GAGACACTGAACCATGCCTCCACAAGCATTCAATTCTCAACACAGCTTCAGGCAG
 AGCAGTCCAGATGCAATTATCCAGTAATCATGCATTAAACAAAATGATTGATGC
 [A, G]
 GCATTTCCTCCCTCTATCATTCCAGTCCATTAGTCTTATTGTTCCATGGTT
 GGTTCTGCCAAATCAGTGAATATACAAATACTGCATAAGTCATGCACATCTACACAC
 CATACATGAAATAGGACTGGGCTGTATCTGAGTTGAATATTCAACATTTTATTC
 CCTCTATGTCCTCACTGAAGTTTAGCCGCTCTTCTTCTTACTTCCCTCT
 CCTCTTTTCCCTCTTCTCTTATAGTCTATTAAAGTGGTCAAAAGTAA

128941 CAATTACACGATTGCCAAGAAAGACTGTAGATATTCAAGGGATGAGAGTGAGATTCTAT
 GAGCCAGAGAACTCAAAGCTGTAAATTAGTGAGTTCTGTGATATCATGCTACGCTCTG
 TTTTAAGAGCTAGATATCAAATAAATGGCCAGTGTATGTGCTGATGGCTATGCTT
 TTCCACTGTACACACAAGTAAGATTCTGCATGGTGACTATCATTTGTTCA
 GATGAATCAGCCGTTGGTCCCTGGGAATGTGGGCTGCTGGCTTTAAATTCTTGG
 [G, A]
 AAGATTCTATGTCATCAGCCATCTGTTATCTGGAAACATGGGACAAACGTTGGCTCT
 CTTTCTACCTATGAGTCCTTGCTAGGGTTGACAGCTTGAGTAGAAATTGGGAAAAGTG
 ATTGGATCTCTGACTGGGATTAGGGAGAATTGGTACATGAGTATACAGAAATTCTTC
 ATTGATCTCTTGCCCTGACCTTGATTAGCCACCTACTTCAGTGGATAAGGCCCTAC
 GAACAAACCAACTGAAGCATACTTCTAGGATAGGCCACACCTTAATCTCATATTATTA

129471 TAAGGCCCTACAGAACAAACCAACTGAAGCATACTTCTAGGATAGGCCACACCTCTAATCT
 CATATTATTATGACCAACTAAAAACTGCTTATCTCTTCTCTTGTCTATTATTTA
 TTCCCTCCTCTACCTTCTTCTAAGTCCTCTGTGATACACTACATGCTCTGCCA
 TTGTGACTATGACTCTAAACAGCTGGTGGCATTACCCACCTCCACCTC
 TCACATGTACACCATGCTTGGCTCTGTGATTGGCTACTATTCTCAACTTAGAA
 [C, T]
 GCCCACTTCTATTATGATCATTAAAGATCCTGGATTATGTGTGGGGTGGATGTAGTA
 ACAACTGGGAAATAGCATAAATTATGGTTCTGTATGCTGGTTCTCCAGAGG
 TAACCTGTTGGTTGACGTTGGCTTAATGTTGTTAATTGACGAAGGTGGAAATGGAT
 GGGCTAGAAATCTTGTTGGGACTAGGATAAGGCTGAATGGCTAATCTAGGGATTCAA
 CTTCTAGTTAAGAATGTACAACCTGTGAGGATAATTGCAATTCTACATATATCC

130568 AATAGAAAAGAAGTATAAAATACAGTGCCTAGGTCTGCAAGTATTACCTGTGACACT

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|--------|---|
| | ACTATGTTGGCCAAGGAGAAGTCTGTATATTGCTTTTATAAAAGCAGAACATG TATAGAAACTATTAGGATATTTCCTCAAAATGTTAAAATTCTTAGCTGCTACAG AGAAATTATTAAGTACTACTTCTCAAAGATCCCATTCTGACAATGCTAATATGGA GGCATTTCAAGATAATGACCTCATAAAATTACACAACTGTCTGTGCAGACTAGA [T, C] AGCACAGTCATGACCTCACTTAGGTCAAGGGACAGATCTTAGCTGATAGGGCAATGGTCA GAAATGCAGTTGGTAAACAGTTCTCTCTGTGACTCATTAATGAAAGA AAGTGTCTCATTCACCTGCATATTTCAGAGATCCACAATGATGGGCCATGCT CCTATGAGTTATACAAAATGGACACTGAGTCTGAGGTACATTAGGAAGCCCCAAC TTATCCTGTATTAAATTCAATTGAAACATTGGATATTATTAATCAAGCCAGTCAT |
| 132179 | CACTTAAAGAACACCAAATCATTTGAGTGACAGGCAATGACACCCTGTAGACTTAT CTGATCCAGAGAACCTGAGGTGGAGCCTATAGCCTCTGGTCAAGGGTGGGGAA ATCTCAAGAACACTTGTCTGAGAGAAAGAAACTTATCTGCTTGTACACATGAGCT GAGCTGAGGAATAGACCTGGATCCAGGGATTCTGTGTTACTGGGTGCCACAACCTGTG TTAGCACTGACATGATTCTCATTTAAATTAGACTAAAACACTCTATCAGACTA [G, C] CGTTTTAAATTAACATTTTCATTTGGTACCTATTATAAAATGGGAAACTGAGTCT TGGGGGATATTAAAGGCTTATAGCTGAAATGGTATAATCAAGGGTAAAGGTTCT GACTCTAATGCTGGTCTCTTCACAATACCTCATTGCCTCTGGAAGTGTAGTTCTA CCCTAGTTCTGCCTTATTGGCTGCTTAACAAACAACTCACTTAAGTCTTGAATC TCATTTGTTCTCTGTAAATATCACAAAACCAACCAACCAACCAACAAACAGTGAGAATA |
| 132792 | GCTTCCATGATTGTTGGATGGTCTTCACAGGCAACAAATTACATGAGGAATGATGCC ACTGCTGTATGCAACATAGTGGCCCTGGATTAAAGGAATCCATGTATAATACATGCA ACCTGAAATCACATATGAAATTGTTATATACTTGATCTATCTATTTAGAGAA GAGGCTAAAGCTTCTGAGAGGCTTCTGTGCGATCTATATCCAAATTCTAAAAAT CATTAGGTTCTGGCACCTCATTAAGTGATTAGTAGGTCTCCTTATGATGTGTTATAACT [C, G] AAAACATCAGTAACCATCTGAAAGAAATTAGGTTAGGACAGGCATGGTGGTACACACC TGTATCCAGCATTTGGGAGGTAAAGATGGCAGTATCGCTTGAGGCCAAGAGTTAAG AACAGCCTGAGCAACACAGTGAGACCTATTTACAAAAATTAAATTGTTATTAAA AGAAATTAAAGTTAGTACATGAAAGCAGCTGAAACTCAGAAACTGACCCCTACATCAGAA ACCATGTGGTATCATGAAAGAAATCTGGCAAAGAATCAAAGATTCTGGCCTACTTTA |
| 133502 | AAAAGAAATCAAATGTGATAATATGGATGAAGGCACCTTGCAAAATATGAGTACCTGC AAAAGTCTGATATTAACCATGAGATATTAAACTATCAAGTCATTTCACTAGTTGTCAC GAGAAAAGGAAAATTGCAAGTTCATCAGCAAATTAGAAGCCTTGCTTTTCATC CTTCAGCAAGGCTCTACAGTGATATTATGCTATAATTCTTGACTTTAATGAGAAATT GGTGCAAATACACCTACAGGATTCAAATGGAGATCATCACCATTAGGAGCTGCTAA [A, T] CAGAACATGTGGCTTCTCTAGCCAAGAGTTCTCCTCTTTATCACCTTATTTATG ATCAGTGGTTCTCAAGGAATGGTCAAGCACCAGCAGCGTGAAGCATCTCTGGGAATATGT TAGAAATGAAAATTCTCGAGCCCCATCCCAGACCTACTAAATCAGAAATCTGGAGGTGG AGCCCAGCAGGCTGTGTTAACAAACCTTAAGAGGATTCTGATGCCCTGCACACTTAA GTGTGAGAACACTGCCATAAGTGAGTATCCTTGAGAGACCTACTTTGGCCTGGTAC |
| 133661 | AGAAGCCTGCTTTTCACTCCTCAGCAAGGCTTACAGCTGATATTATGCAAAATT TTCTTGACTTTAATGAGATTGGTCAAAATCACCTTACAGGATTCAAATGGAGATCAT CACCAATTAGGAGCTAAACAGAACATGTGGCTTCTCTAGCCAAGAGTTCTCCT CTTTATCACCTTATTATGATCAGTGTTCTCAAGGAATGGTCAAGCACCAGCAGCG TGAGCATCTCTGGAAATTGTTAGAAATGAAATTCTCGAGCCCCATCCAGACCTACT [A, G] AATCAGAAATCTGGAGGTGGAGCCCAGCAGGCTGTGTTAACAAACCTTAAGAGGAT TCTGATGCCCTGCACACTTAAGTGAGAACACTGCCATAAGTGAGTATCCTGGAGAG ACCTACTTGGCTCTGGTACTTTAAGGAAAATCGTGGGCCAGTAACTCAAAGAGT ACCTCATCTAAGTCTCTGAAGGGCTGATGTAGAGCAAAGGTTGGCTAGTGAATGTCAA TGTAGCAAACATGGTGGGTGACCCAAACATAATCAAATAGGCCTTCTAGGTTAAAG |
| 133768 | AAATGGGAGATCATCACCAATTCTAGGAGCTGCTAACAGAACATGTGGCTTCTCTAGC CAAGAGTTCTCTCTTTTATCACCTTATTATGATCAGTGTTCTCAAGGAATGGTCA AGCACCAAGCAGCGTGAAGCATCTCTGGAAATATGTTAGAAATGAAAATTCTCGAGCCCCA TCCCAGACCTACTAAATCAGAAATCTGGAGGTGGAGGCCAGCAGGCTGTGTTAACAA ACCCTTAAGAGGATTCTGATGCCCTGCACACTTAAGTGAGAACACTGCCATAAGTG [G, T] TATCCTGGAGAGACCTACTTGGCTCTGGTACTTTAAGGAAAATCGTGGGCCAGT AATCCAAAAGAGTACCTCATCTAAGTCTCTGAAGGGCTGATGTTAGAGCAAAGGTTGGC TACTGAATGTCATGTTAGCAAACATGGTGGGTGACCCAAACATAATCAAATAGGC TCTTAGGTTAAAGTCTGATGTTAGGTTGCTGCTGAGAGAAGGAAATACAAATGTATCTCA AGGAATGCAGTTCTCTCAAGATTCAAGAAAGTATGGATACTTGGCATGCCATGGCAGCTT |

FIGURE 3, page 99 of 122

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| 133837 | TCCTCTTTATCACCTTATTTATGATCAGTGGTCTCAAGGAATGGTCAGCACCAGC AGCGTGAGCATCTCTGGAAATATGTTAGAAATGAAAATTCTCGAGCCCCATCCAGACC TACTAAATCAGAAACCTGGAGGGCCAGCAGGCTGTGTTAACCAAACCTTAAG AGGATTCTGATGCCCTGCACACTTAAGTGTGAGAACCCTGCCCATAAGTGAGTATCCTG GAGAGACCTACTTGGCTGGTACTTAAAGGAAATCGTGGGCCCCAGTAACTCCAAA [A, C] GAGTACCTCATCTAAGTCTCTGAAGGGCTGATGTTAGAGCAAAGGTTGGCTAGTGAATG TCAATGTTAGCAAACATGGTGGGTGACCCAAAACATAATCAAATAGGCCTTAGGTT AAAGTCTGATGTTAGGTTGCTGGTGTAGAAGGAATACAATGTATCTAAGGAATGCA GTTCTCTAAGATTAGAAAGTATGGATACCTTGCCATGCCAGCTGGCAGCTGAAAGGAAT AGCAATGTAAGTAAACCACGCCATGTGAAAGTAGCTCCATAGCAGGCTTCTCTC [A, G] |
| 134003 | AACAAACCTTAAGAGGATTCTGATGCCCTGCACACTTAAGTGTGAGAACCCTGCCATA AGTGAGTATCCTGGAGAGACCTACTTGGCTCTGGTACTTAAAGGAAATCGTGGGGC CCCAGTAATCCAAAAGAGTACCTCATCTAAGTCTCTGAAGGGCTGATGTTAGAGCAAAGG TTGGCTAGTGAATCTCAATGTTAGCAAACATGGTGGGTGTGACCCAAAACATAATCAA TAGGCTCTTAGGTTAAAGTCTGATGTTAGGTTGCTGGTGTAGAAGGAATACAATGT [A, G] TCTCAAGGAATGCAAGTCTCTCAAGATTAGAAAGTATGGATACCTTGCCATGCCAGC AGCTTGAAGAAATAGCAATGTTAAAGGTTAAACACGCCATGTGAAAGTTAGCTCCATAG CAGGCTTCTCTGAGATTGAACTTATGAAACATGAAACAAATATGAAAATAGATA ATTTTATTGAAATATCATATCACTACCACTATTAAAGTGTGTTGATGTTAAATGGCT AACCTTTTCAGGTAGTTACTCCACCAAGCTTGTGGCCCTGAAAGTAACAGT |
| 134098 | GGTACTTTAAGGAAATCGTGGGCCCCAGTAATCCAAAAGAGTACCTCATCTAAGTCTC TGAAAGGGCTGATGTTAGAGCAAAGGTTGGCTAGTGAATGTCATGTTAGCAAACATGGT GGGTGTGACCCAAAACATAATCAAATAGGCCTCTTAGGTTAAAGTCTGATGTTAGGTT GCTGGTTGAGAAGGAATACAAATGTATCTCAAGGAATGCAAGTCTCTCAAGATTAGAA GTATGGATACTTGCCATGCCAGCTGGCAGCTGAAAGAAATAGCAATGTAAGTTAAACCA [C, -] GCCTATGTGAAAGTTAGCTCCATAGCAGGTTCTCTCTGAGATTGAAATTATGGAAC ATGATAACAAATATGAAAATAGATAATTGAAATATCATATCACTACCACTATT AACTGATTGTTGATGTTAAATGCTAACCTTTTCAGGTAGTTACTCCACCAAGCTCTT TGCTGGGCCCTGAAATGTAACAGTGAACAAGAAAAAAATCTCTTCAGGAACACTCA CACTTCATGAAGGGAAATTAGAAGAAATTAGCCTATTACTGTTCAAGTTAGGGTGT [T, C] |
| 134530 | ATGTATTAATGGCTAACCTTTTCAGGTAGTTACTCCACCAAGCTCTTGCTGGCCCT GAAAATGTAACAGTGAACAAGAAAAAAATCTCTTCAGGAACACTCACACTTCATGA AGGGAAATTAGAAGAAATTAGCTTACTGTCAAGTCTAGGGTGTGAGAGGCTA GATGCCGACCTACACTCAGTCTATGAAATAGGGTTCTCAAAGGAAGAAATGTATA AATTAGACCTCTGAGAGTGAAGAGGAGTTGATCAGTTAGGTGGAGAAACAGATTAG [G, A] ATAACTATACACTAGATCACACAGCAAGTAAGTGTAGTGGATTGAACTCAGGTT GGTTTCATCCAAGCCATTGCTTCACCTTAAGGCAAGGGCAGAAATGGTTTATC AAGCTGTCAATTGACAAATTAAATGGCTTCAAGAATGTGGATGTTGAATACTCG GTGAGCACTGGCTCAATTGGAAAAAAATGCCATGATTAAATTAAATGTCTCCCTG GGTCAGAGAGGGGTGTATGTCATGCATTGCTACCTGCAGTACAGACTGC [T, C] |
| 134746 | GTTTCTCAAAGGAAGAAATGTATAAATTAGACCTCTGTAAGAGTGAGAGGAGTTGATCAC TTTAGAGTGGAGAACAGATTAGGATAACTATACTCTAGATCACACAGCAAGTAAGTGA TAGTGGTTGGGATTGAACTCAGGTTGGTTCTACCAAAGCCATTGCTTCACCCATTAAAG GCAAGGGCAGAAAATGGGTTTATCAAGCCTGCAATTCTGACAAATTAAATGGCTTC CAAGAATGTGGATGGTGAATACCGGTGAGCACTGGCTCAATTGGAAAAAAATGCCA [T, C] GATTAATTAAATAATGTCTCCCTGGGTTCAAGAGAGGGAGGGTGTATGTCATGCATTG CTACCCCTGCACTACAGAGTACTGCCCTCAGGACTTAGCAGAGAGGATGAAATCTGCC TGTTCTTATTCTGAGAGTGTCTATGACTCTCAAGAACCTTAGAGCTCAATGGCATT AGCAGGGGCTTATATATGTTAGCAAAGGTAGCAAGTGACAGCAGCCAGATGGAGATTCA GTAAAAAAGAGAATAAAGTTCTGTCAAAAGAGAAGACACTAATTAAAGTTAACAGTGA |
| 135854 | TGCTTGGAAATGGCTCTGGATGAAATTCTTGCACAAAGCTCTTCACTTCCCCAG CTCACCTTCACATTAAACGTAATAAGCACTCTTACTCTAGACATTAAACAGATGTTT TAAATAACTCAGTTATTGGGATAATAAAAGAAGAAGATGACCTCCCCAAAAGTCCCAAG GTCAGAGCTATTGCCATGAGCAATTGCCCCAGGAAGAATGTTGATGACTCT CTCTCAACCGTGAACAGCACACCAACCTGCACCCATTTCAGAGGCTCACCTT [G, T] GGTTGAGGGTGAATTGAGTATATGGCCTCAGCAGTCACCGCCCAAGGGCTGTGCC TTGTCATGCTCTCTATCACCCACCCACCTGCAGCCATCAGAGAGGACAGTTCTC TGATCCTCCCTCCCTGATGCATTACATGAGAGATGGGGAGGAGCTTCCCTTGAGA CTTGTTCACCTGTTACTTGAAGACAAGATTACAGTACCCAGGAATCAAACATT TCTCTGATCACGTACGTCAGCTGACAGTGTAAATTATCTGATTGTCATTTACA |

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| 136893 | ATATAAGTCCCTAGTACATCTCTATTTTTTTAGCAATATTGCTGCTGAAGCTTAGCTGTGCTCTGGCCACCGAGGAGAGCTTCTAC TCCATTCCATGGGAGAACATAGCCAGGAATGCTGGTGTGAGGAGATTGATTCTAC TCCTACTCTGCCATTAACTGTATGACTTGGCAAGGCTCTTCTGGTCCAGGCCAG CCCCAGCTATTCAAGCATCCATTAGGATAGGTGGCTCTAAGGAGCCTTCTAGCCCCA [G, A] CATTCAAGGACTTAGGAAACTAGAAATTCTGGGTCAGTTGAGTTCAGTGCACCGCA TTTGCCGACTGACTTCTCTTGTACATCAAGCACCATACGGGGCACTGCAGGGGATATGT TTATATCAGAGCTCTCTGATACACGGCACTCACGGCAAAGGGAGAGTGGGATGAGA AAAACAAGTGTATTGATATACCAGTCAGAGCAGACTATGTTGATGCTGAAAGCAAAGT ACAAATGATTATAGGGCCAAGGAAGCAGAAATTCTATTATGAAAGTCAAGAAT |
| 136945 | GCTTAGCTGTGCTCTCGTGTGCCCACCTGCTCTTCTGGCTCAGGGTGTGGTCTA GTTAATCCTCATTCCATGGGAGAACATAGCCAGGAATGCTGGTGTGAGGAGATTG ATTTCCTACTCTCTCTGACATTAACGTATGACTTGGCAAGGCTCTTCTGGTCC CAGCCCAGCCCCAGCTATTCAAGCATCCATTAGGATAGGTGGTCTCTAAGGAGCCTTC TAGCCCCAGCATTCAAGGACTTAGTGGAAACTAGAAATTCTGGGTCAGTTGAGTTCAGTG [C, A] CACCGGCAATTGGCCGACTGACTTCTCTTGTACATCAAGCACCATACGGGGCACTGCAGG GGATATGTTTATATCAGAGCTCTCTGATACACGGCACTCACGGCAAAGGGAGAGTGT GGATGAGAAAAACAAGTGTATTGATATACCAGTCAGAGCAGACTATGTTGATGCTGGA AGCAAAGTACAATGATTATAGGGTCAAAAGGAAGCAGAAATTCTATTATGAGAAA GTCAGAATAAAACTCATGGCATTTCAGATCAGCCTGAAAGAGAAAATTCAACAGGAT |
| 137997 | TTTTAAATGATTAAAAGTCTAGATGATTAAATAGGAGAGAAAAGCAGAGGAGCTGAT TGAGCAAATGCTGAGAGGAGGTTAAAGTGTGGGACATATTAGGCAAGTGTATTTCAG TATTAGGGTCTCTCTCCACAGTTGAGAGGTTCCACCTGAAGTCTGTTCATCTCAT CTCTTCCAGCTATGCCAGGCCCTGACTCTGCTCTCTATGTTGAGAATGACAATCTAG TCTCTGTGTGTGTCTGT [-, T] ATGTGTTGTGCTGTGAAGCTGAATGCCAGCACAAATTCTCATCAGCATTGAGTTCTATTG GCAGCATTGAAAGAACAGTATAGACCCCTAGCTCTCAGTGTCAATATAGACATTGGCACA TTAGTTTCACTGAATTAACTCATGTAGGACTGACGCTAAGGGACAGTTAGAGTGGAGTG GAAACTTCTCTGCATACAGAAATAACATCTCAGCACTGTCTGTGTAGCAAGATGTATTAT CATCATCTTATTGGTACTGGACAAAGCAGGATCTCAGATGGTGCCTGAGCAGACTATAGGG |
| 139348 | CCCCAGTCAGAATGAAGTCACTAACTCCAGAGTAAAGAATGGGCAAGCGATGCTCT GTAAAGTGAATTCTAATGAGGTTAAAGTGGGCAAGTCTACTGGAGGAGAGAGGACAGC ACGGAGGAGAGTGGCATGGGAAGTGGAGAGAGCTGCATATGCCCAACCTCCCCAGTCT CTGAGAGATATTCCACACAGGAATTCTGACCCCTGCCAGCAATTGTCATGACTCTG ACCATGGAAAGCATAACGAGAAAAGTACGCCAGAAAAGTGTATCATGGTCCAGACCA [G, C] AGACAAACAGAGAAAAGTGGCTGCAAGTCTCAGCATCACTCAGAAAGCCTTGTCCAAAGG CACTATTAAAGTATCAGGCAGACAGAGAGATTCTCTGAGACACAGCTCTGTCTCACAGGA AGGACTCACTGGATAAGATGGGAGGCAACCCAGGCAGGCTAGCATTGATGCAAGATGCT GAGTGCCTACAACAAACGTCTAACGAGCTTGTGTTAGGTGAGTGTGAAGGGAGGATCAGA CATAGTTAATTCTAACACGAGGTAGGAAGTGTAAAGTGTGCTAATAGCAATAACAGCCAA |
| 139437 | GGCAGGGTCTACTGGAGGAGAGAGGACAGCAGCAGGGAGAGTGGCATGGGAAGTGGAGA GAGCTGCATATGCCCAACCTCCCCAGTTCTGAGAGATATTCCACACAGGAATTCTG ACCCCTGCCAGCAATTGTCATGACTCTGACCATGGAAAGCATAACGAGAAAAAGTACG CCAGAAAAGTGTATCATGGTGGTAGACCAGAGACAACAGAGAAAAGTGGCTGCAAGTCT CAGCATCACTCAGAAAGCCTTGTCTCCAAGGCACATTAAAGTATCAGGCAGACAGAGAG [A, -] TTCTGAGACACAGCTCTGTCTCACAGGAAGGACTCACTGGATAAGATGGGAGGCAA CCCAGGAGGCTAGCATTGATGCAAGATGCTGAGTGCATAACAAACGTCTAACAGCCT GCTTAGGTGAGTGTGAAGGGAGGATCAGACATAGTTAATTCTAACACGAGGTAGGAAG TGTAAAGTGTGCTAATAGCAATAACAGCAAGAAACTATGAGAGGCCAGCGAAGGATGGAT TAATTCTGACTGGACTCTCACAGAAGAGGTGGTCTAAGTGGACCTTGAAGGATTGG |
| 140321 | GTTCATAAAATGATAGTTTATTGTCGTGCTATGACTATTTCAGTGAACATTATCTCA GTCTTCTGGGTAGCATGAGGCTAATTGGCACTGTTAGGCAATTAAAGTTAACG AATGCACCTACAACCTCATCTGCTTGTCTCTCTCAGATCTGTATATGAGCATCT TTGCCTATTCTGGATCATAGTCTGCTTTTTGTTTGTATTGTTGTGGGTTTT TCTATACAATAGAGCAATTATTGATTCTCTTATAATTCTCTTCTGTCTAAAGT [C, T] CTACCTTGGATGGCCACTCTTGTGTGTTAGATCCAGTAGTGTAGTGCAGAAGGAC AGTTACCATAGTCAGCCTCTCAGTTAGAATTCTGTCGTGTACAGACCCAGCTTGTCC TCTCCTAGTCACCACTATGCTGCTGAGAATCATCATAGAAATATGGAACTGAGCAGGAACT GCAGCCAAATCTTGTGTTACCAATGAGAACCTCCAGGCCAGGGACAGGAAGAAAAGT |

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| | TCAAGTTGTACAGAGAGACAGGCAGGGTGGCCTGTGACTAGTCCTCAAGTGTGCTG |
| 140570 | TAGAGCAAATTATTGATTCCTTTATAATTCCCTTCCTGTTCTAAAGTCCTACCTTG GATGGTCCACTCTTGTGTTGTCAGATCCAGTAGTGAGTGAGAAGGACAGTTACCA TAGTCAGCCTCTCAGTTAGAATTCTGTCGTGTCACAGACAGCTTGTTCTCCTAG TCACCACTATGCTGAGAACATCATAGAATATGGGAACCTGCAGGAACAGCAA ATCTTTGTTTACCAATGAGAACCTCCAGCCCAGGGACAGGAAGAAAATGTCAAGTT [G, A] TACAGAGAGACAGGCAGGGTGGCCTGTGACTAGTCCTCAAGTGTGCTGACTCACAGG CCAGTGCCTGGATGGTTGCATGCCCTTCTGCTTTCTCCGCAGACTAGGCTGTA GGAGGGCAAAATGCCCTTCCTCCTCATTCCTTCCCTCCCCCTCCCTGCCTGCT TTGGTAAAGCTAAACATGCAGCTCGTGCCTCACAAGGCATCCTCAGCATGCTTTCA CACGACCCCTGACTCGTGCAGCTTGCAGCCCAGTTGACAGCCAGTGAA |
| 141441 | CACGCATTATGCAATTGCACTATGTTAGTAGGCATTCTGCCTGGACTTTAAAAACAT GCTTGCCTTCTAGGATCCTCATCTGGAAATCTGCCCTCTCCCTCTTAAGGGATTG CCCTTCCCTGAAATGTGCAGAACATGCTGTTCTACTGCAGAATTATTCATTTCT TCATGCAATTTTATTAGTGGCTCATAGTGTGCTTCTCATGCATTGGAATGACCCTCT TAGAGGCAAGGGTCTTGACTGTTCTTCCCCACTATACACACATACACTATGTTGAAT [T, C] GATAAATTACTTACAGTGAATTGTTGTTATTATAATAGACATGTTGCAAGGTACTT TAGCAAAGTGATAAGGACTCATGTTGAATCAGACATACAGGGTTGAAATTGAGCTCCA CTATTATCAGTCTGTGACCCCTGCCTACCTATGTTACTCCCTTTGTTAAATGGC AATAATAATAAGTACACCCCTCTAACGCTGTTACAGAGATTAAGAATGATGAAAGTA AAATGTTAGTCTATTTCTAGCATTAAGTGCCTAGTATATGCAAGCACCTATTAGTAA |
| 141639 | TGGCTCATAAAGTGTCTTCATCGCATTGGAAATGACCCCTTCTAGAGGCAAGGGTCTTGA CTGTTGTTTCCCCACTATACACACATACACTATGTTGAATTGATAAAATTACTTATTCT AGTGAATGTTTGGATTATAATAGACATGTTGCAAGGTAGTTAGCAAAGTGATAAGGA CTCATGTTGAATCAGACATACAGGGTTGAAATTGTTAGCTCCTACTATTATCAGTTCTG ACCCCTGCCTACCTATGTTAGTCCCTCTTGTAAATGGAATAATAAAAGTACA [C, A] CCTCTTAAGCTGTTACAGAGATTAAGAATTGATGAAAGTAAATGTTAGTCTATTCT CTAGCATTAAAGTGCCTAGTATGCAAGCACCTATTACTAATTATGTTAGAAATAATA ATGATAATTATCATCATCATCATCATCATCATTTGTTGCCACTGTGGCTGTGCC AGGTTCTCCAGATCTCAATGATCCCCCTTCTTCTTAGATATGTTAGGAGATAAGCA AAGGAATATATTGAAAGAAAAAGCCAATGTTATTACTGCGTGGCTGTGCTATGCTG |
| 141796 | GTAGTTAGCAAAGTGATAAGGACTCATGTTGAATCAGACATACAGGGTTGAATTGTA GCTCCACTATTATCAGTCTGTGACCCCTGCCTACCTATGTTAGTCCCTCTTGTAA AATGGAATAATAAAAGTACACCCCTCTAACGCTGTTACAGAGATTAAGAATTGATG AAAGTAAATGTTAGTCTATTCTAGCATTAAGTGCCTAGTATATGCAAGCACCTAT TAGTAATTATGTTAGAAATAATAATGATAATTATCATCATCATCATCATCATC [A, -] TTTGTGCCACTGTGGCTGTGCCAGGTTCTCCAGATCCTCAATGATCCCCCTTCTTCT TAGATATGTTAGGAGATAAGCAAAGGAATATATTGAAAGAGAAAAGCCAATGTTATT ACTGCGTGGCTCTGCTATGCTGTTCTATGAGCTGGAGGACCCAAGAAAGCTACT TCCCTGTGGCCCTCACCTATTCTGGCTGTGATCTCAGCACTATGGGATCAGAAG AGGCCACCCAAAACAATAGGAATAAAAGGAATTGGCCAATGCTTGAACAAGGC |
| 141797 | TAGTTAGCAAAGTGATAAGGACTCATGTTGAATCAGACATACAGGGTTGAATTGTA CTCCACTATTATCAGTCTGTGACCCCTGCCTACCTATGTTAGTCCCTCTTGTAA ATGGAATAATAAAAGTACACCCCTCTAACGCTGTTACAGAGATTAAGAATTGATG AAAGTAAATGTTAGTCTATTCTAGCATTAAGTGCCTAGTATATGCAAGCACCTAT AGTAATTATGTTAGAAATAATAATGATAATTATCATCATCATCATCATC [-, C, T] TTGTTGCCACTGTGGCTGTGCCAGGTTCTCCAGATCCTCAATGATCCCCCTTCTTCT AGATATGTTAGGAGATAAGCAAAGGAATATATTGAAAGAGAAAAGCCAATGTTATT CTGCGTGGCTGTGCTATGCTGTTCTATGAGCTGGAGGACCCAAGAAAGCTACT TCCCTGTGGCCCTCACCTATTCTGGCTGTGATCTCAGCACTATGGGATCAGAAG GCCACCCAAAACAATAGGAATAAAAGGAATTGGCCAATGCTTGAACAAGGC |
| 141799 | GTTTAGCAAAGTGATAAGGACTCATGTTGAATCAGACATACAGGGTTGAATTGTA CCACTATTATCAGTCTGTGACCCCTGCCTACCTATGTTAGTCCCTCTTGTAA GGCAATAATAAAAGTACACCCCTCTAACGCTGTTACAGAGATTAAGAATTGATG GTAAATGTTAGTCTATTCTAGCATTAAGTGCCTAGTATATGCAAGCACCTATTAG TAATTATGTTAGAAATAATAATGATAATTATCATCATCATCATCATCATT [T, -] GTTGCCACTGTGGCTGTGCCAGGTTCTCCAGATCCTCAATGATCCCCCTTCTTCT ATATGTTAGGAGATAAGCAAAGGAATATATTGAAAGAGAAAAGCCAATGTTATTACT GCGTGGCTGTGCTATGCTGTTCTATGAGCTGGAGGACCCAAGAAAGCTACTTTC |

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| | CCTGTGGCCCTCACCTATTCTGGCTGTCAGACTATGGGATCAGAAGAGG CCACCCCCAAACAATAGGAATAAAAGGAATTGGCAATGCTTGAAACAAGGCAGG |
| 142186 | TATATTGAAGAGAAAAAGCCAATGTTATTACTGCGTGGCTGTGCTATGCTGTGGGCT TCTATGAGCTGGAGGCCAACAGAAGCTACTTCCCTGTGGCCTCACCTATTCTGGCT GTCTGGATCTCAGCACTATGGGATCAGAAGAGGCCACCCAAAACAATAGGAATAAA AGGAATTGGCCCAATGCTTGAAACAAGGCAGTCCAAGCTCCACCTCAGATCTTCA GAGTGAAGTCCCCTCCCATGCTCAAAGCAGCTAGACCTGCACAGCACCCCTCAA [G, T] AAGCAAATCCAGCAGAGATTTATGGCTTACGACCATCTGGCTTATCTCTTAGCTG CTTGAAGGAGACAATAGAGGGTGGAGGAGAAGTAATCATCTAAAACCAACAGGTGGCCC CAGTTGAGGCTAGTAGCAGCATGGCTGTGGTGGTGGTGTCTGGTGTATGTGTGG AAGTCCAAGGAAAGTCTATAATGCTAGTGTCTAGTGTGTGAGAACCTATGGAGGAAAT CAGAACTTGAGATAGAGAAACAAGTCTGTAAATGTAACGCCATTGGATCTGGAAATA |
| 142212 | TTATTACTGCGTGGCTGTTGCTATGCTGTGGGCTCTATGAGCTGGAGGACCCAAGAAAG CTACTTCCCTGTGGCCTCACCTATTCTGGCTGTGGATCTCAGCACTATGGGATC AGAAGAGGCCACCCAAAACAATAGGAATAAAAGGAATTGGCCCAATGCTTGAAAC AAGGCAGGTCCAAGCTCCACCTCAGATCTCAGAGTGAAGTCCCCTCCCTCCATGCT CAAAGCAGCTAGACCTGCACAGCACCCCTCAAAGAAGCAAATCCAGCAGAGATTTATG [G, A] CTTTAGCACCATCTGGCTTATCCTTAGCTGTCTGAAAGGAGACAATAGAGGGTGGAG GAGAGTAATCATCTAAAACCAACAGGTGGCCCCAGTTGAGGCTATGTAGCAGCATGG CTGTGGTGGTGGTGGTGTCTGGTGTATGTGTGAAAGTGCAGAGGAAAGTCTATAATGCA TGTTCTGAGTGTGTGAGAACCTATGGAGGAAATCAGAACTTGAGATAGAGAAACAAGTC CTGTTAATGGTAACGCCATTGGATCTGGAAATACTGTGTTGCATAGTCCATGTCTGT |
| 142600 | GTGGCCCCAGTTGAGGCTATGAGCAGCATGGCTGTGGTGGTGGTGTCTGGTGTAA TGTGTGAAAGTGCAGGGAAAGTCTATAATGCACTGTCTGAGTGTGTGAGAACCTATGG AGGAATCAGAACTTGAGATAGAGAAACAAGTCTGTAAATGTAACGCCATTGGATCT GGAAATAACTGTGTTGCAGTCCATGTCTCTTCTACAGATGAGGAAACAAAAGCT CTTCATTTAAGGAGAGAAATGTCACACTCTCTGTAACTCTTTACTGACATTGATTG [A, T] ACCTCTCAATGGCAAAGACTGTGTTGTGCATTAGATAGATATGCTGAGAAATGAGAAAGA GGCTGTGCCCTCAAAAATTGTCTAAAAGGGAAACATCTAGATAATCAATGAGCTAATA AATGATTAGATAACAGTGTGTCCTCAACCATCTTGGATTCAACCACATTCTCCACA CTCTCTCAAAGACTCCACTCATGCCCTGGTAGTCAAAAGCTCCTGCCAGTAGCCT CTTCTCTGATCAACTCATATATTCTGCTCATATCACCTTGTGGCATACCAGAAAT |
| 142631 | GGCTGTGGTGGTGGTGTGGCTTGTATGTGAAAGTGCAGGGAAAGTCTATAATGC AGTGTCTGAGTGTGTGCAGAACCTATGGAGGAAATCAGAACTTGAGATAGAGAAACAAG TCCTGTTAATGGTAACGCCATTGGATCTGAAATAACTGTGTTGCATAGTCCATGTCT GTTCTCTACAGATGAGGAAACAAAAGCTCTCTCTAAAGACTCCACTCATGCCCTG GTGAGTCAAAGCTCTGCCAGTAGCCTCTCTGATCAACTCATATAATTCTGCTCA TATCACCTTGTGGTGGCATACCAGAAATCAAGAATCAATTGTTGTTCAAACCTG [T, C] TAGATAGATATGCTGAGAAATGAGAAAGAGGTGTGCCCTCAAAATTGCTCTAAAAGG GGAACATCTAGATAATCAATGAGCTAATAAATGATTAGATAACAGTGTGTCCTCAACC ATCTCTTGATTCAACCACATTCTCCACACTCTCTCTAAAGACTCCACTCATGCCCTG GTGAGTCAAAGCTCTGCCAGTAGCCTCTCTGATCAACTCATATAATTCTGCTCA TATCACCTTGTGGTGGCATACCAGAAATCAAGAATCAATTGTTGTTCAAACCTG |
| 145397 | GGCAGCATGTGCTTGGTGTATGCCCTCATGCCCTCTGGAAAATAGTAAAGAAG AAAATGTATAAGTTAGAGAGGTGAAAGAGTGTAGAGCTAATTAAATCTCACTTATTG CTTATGAGGAAATACTCCAAAGAGGAGAAATGACTAAGTCTATATAAAAGACCTGCAG CTAATTGGTCATTAGTCATATAAGAACCTGCAGCTACTTGGTCATTATGCATTAA TTCCATTGAGACATGTTCACTGCCTCCATGTGCCAGGCAGTGTGGTAGATGCTAG [G, A] ACAATAGTGATAAGTAAATAAACATGATTCTGCCCTAATCAGGGAGATGAAATTAAACA AATAAACAAAGTAAACAAAATAATTAAAGATAGAGATAAGGTATGAGGAAAGAAC AAGGTACCGCAATAGAGAATAAAAGAGTAGGGACGGGGCACGGTGGCTACTCCTGAAATC CCAGCATTGGGGAGGCGAGGGGGTGGATCACAAGGTCAAGGACATCGAGACCATCCTG GCTAACACGGTGAACCCCATCTACTAAACAAAAATTAGCCAGTCGTGATG |
| 145438 | CTGGAAAATAGTAAAGAAGAAAATGATAAGTTAGAGAGGTGAAAGAGTGTAGAGCTAA TTAAATCTCACTTATTACTTGTAGGAAATAACTCCAAAGAGGAGAAATGACTAAGT TCATATAAGAACCTGCAGCTAATTGGTCATTAGTCATATAAGAACCTGCAGCTAC TTGGTCATTATGCAATTATTCCATTGAGACATGTTCACTGCCTCCATGTGCCAG GCACTGTGGTAGATGCTAGGACAATAGTGTAAATAACATGATTCTGCCCTAAT [C, T] AGGGAGATGAAATTAAACAAATAACCAAAAGTTAAACAAAATAATTAAAGATAGAGATA AGGTATGATGAAAGAACAGTACCGCAATAGAGAATAAGAGTAGGGACGGGCACG |

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| | GTGGCTCACTCCTGTAATCCCAGCATTTGGGAGGCCGAGGCCGGGTGGATCACAGGTCA GGACATCGAGACCACCTGGCTAACACGGTAAACACCCCATCTACTAAAAATACAAAAA AAATTAGCCAGTCGTGATGGCAGGCACCTGTAGTCCCAGCTACTCGGGAGGCTGAGGAG |
| 145855 | CACGGTGGCTCACTCCTGTAATCCCAGCATTTGGGAGGCCGAGGCCGGGTGGATCACAG GTCAGGACATCGAGACCACCTGGCTAACACGGTAAACACCCCATCTACTAAAAATACA AAAAAATTAGCCAGTCGTGATGGCAGGCACCTGTAGTCCCAGCTACTCGGGAGGCTGAG GCAGGAGAATGGCTGAACCCGGGAGGTGGAGCTTGAGTCAGTGAGCCGAGATCGGCCACTG CAATCCAGTCTGGCAACAGACTGAGACTCCATCTCAAAAAAAAAAGAAAAAAA [A, -, G] AGTAGGATGAGTATTTAGAGAAGGCCCTCATGAAGAGAGAACATTTAAGCTGAGATCT GAAGAAATGCGAAGGGTCAGGCCACTAAAGAGGGTGGAGAGCTTCTAGGAGATAACA GCTTGTGAAACCTCAAGGCAAGAAAGTCGGGACTGTGCTGAAAGGTAAAGAGAAAGACC AGCATGAAGGCCAGGCAGGGTGTCAATGCCCTGAAAGCAGATGTGGTGGGAGAGATAGGC AGGGCCAGAAGTCAAGAGCTCAGAGTCAGACTGCTTATTGGCAGACTCTTGATTGAT |
| 146816 | GATGAATTGCTGATTTAGGGCACCCCTCGGGCTGCCTCTGTAGCTTCAGTAAAGCTT TGTCTGATTGACAGATGCTGATCAAGTTCATGGGTATGCATTACAGTGACGTTGCTG GTTGGCCTAGGAAACCCATTGACGTATGACTTCTATAGGAAAGAATGCCAAATAAG AAACAAAAGATTTTCTGCACTCACCCAAAGGAACAGAAATTAAAGACAGCCAAGGA AGACTGCTCTTCAACGGATGATTACCTGGTGTCTGGCTAGTGGTCAAGTGGTTCATTC [G, A] TGAAACAGCAGAAGGTATTTGTGACTATGGGATTGCGGAGATGACTGGGCCAGGAGGG GAACCTGTAAGCTAATCTCTCCACAACCCACTCTCTGGCTATGGCTTGTGCTTT GTTTGTCTGCTTGGCTGGTCTGTGCTAGTCCCAAAGGCTGCACAAAGGCAGAGCT AGGTAGATGTAACCTCTACCAGGGCTCTTAGTGAATCCACCTCTAGCCCCAGATGAG GCTGAGTGAACACTCACTCCAGCCTGGACTGTAGCCTTACTGTGGCCCTGAACCTAA |
| 147228 | TTCGTTTGTGCTGGCTGGTCATGTGCTAGTCCAAAGGCTGCACAAA GGCAGAGCTAGGTAGATGTAACCTCTACCAGGGCTTACTGCAATCCACCTCCTAGCC CCAGATGAGGCTGAGTGAACACTCACTCCAGGCTGGACTGTAGCCTTACTGTGGCCCC TGAACCTAACCCAAAGAATGAGACTTGTGACCCAAGGCTCAGACCCAAAGTCTCAGATCC CTTATTCAAAGAGAGCTCCTCACCCAGCTCAGACTGAGCCCCCTGGCCAGCATTCT [G, C] GCTGAGTCCCCACAGCTGGTAGAGCCTGGCCTAAAGGGTCATCCACAATGTTGAG TCCCTGGTACATATTCACTTTGAATGAAACCTCTGAGGACCCCTGCCCTCAAGACT GGCGTCTCTCTGCCATCTCATAGTGGCTTTAGCCATGGAGCAGTGTCTAGCCTC CTCTAGCTCAAAGCTGGCGGTGTAAGAAGAGGAAGCCTGAAACTCAGAACCTGTGCA TTGTGCCAACATGTTAGTGCAGTCTATCTGTGAGCTTCACAGTCCATTGACTCTTGTA |
| 147968 | TGGGCTCAGACGTGTGTCATCCTGCAATGCCCTGGCTCCATCTGTTCATGGGTT AAAGGTCACTCTTCTGCCCTGCCCTACCTTATTGAGTATTCAACACAGAAAATGAATGTA GGAGATTGAAAATTGATAATGCACTCTAAGTTATTACCTCTCCAAATTGTCAGCA TTTCATCTGCTATCTAGCAGCAGAATAGTGTAGGGTAGGACTTACAAACTACAGCCC ACAGGCCAAAGCCAGCCAAGGGCAGATTCTAAATAAGTTTATTGAAACACAGCAA [T, C] GTAAATATGTAACACTATTGTTACATATTGCTTGGCTGCCTTCATGCTATAAAAGT AGCACTGAGTAGTGCAGCAGAGACCATGGCCGAAACCTAAGATATTACTATTG GCTTTTGCAAGAAAAGTTGCTATACCTGGCATAGAGGAGCAAAGTGAGGACTCTGAA GTTGAATGCCGTGTTGGATTCTGAATCTACTTAATGGCTATATGACCTGTGCA AGTTAATTAGCTTACCTTCTATGAAATAAAACATTGATCCCCACCTG |
| 149372 | AAATGCTCTATTGAAACCCATTCAACATCTCAGGGTTGAGTCTGTAATGGGATGTA AATCTCTTCTGGGAGAAACGGCTGAGGAGACTGGGTGTTGAGGTGGAAATACATTA AGGCTGGTGGGGTTGAGTGCAGCAGGCCAACAGAGCACAGCTCTCATCTCAGTGGCTAAG CTAACAGGGAGTGTCAAGTTCAGTGGACTGAAGCAGCAGGGAGTATTACGTATCTCCA GACCTGTGGATGCTAGATGGCAACCTAATTAGAGGAATATGAAACAGTAACAGCACC [G, A] TGCAATTTCGTTATTCCCTACCTAGCTTATTGAGTTATTGTTCTATTATATTAGCAGA AAAATGAGGATTGGAGAGCCTCTCTCAAGGGGCTTACATCTCAATTGCGAGTGA AAGGCATAAATAACACAAAAAGTACTTGTATAATATAAAATAATCAATTCTAG TGCAAGACATGTCATGAAAGAAGATGGCTAACCTAGTGTCCAGAGATAAAATAGGT AATGACTTGCATTCTCATTTATTCTCATATTCAATTGTCACAAATTGTTGAGT |
| 149466 | CTGGGTGTTGAGGTGAAATACATTAAGGCTGGTGGGGTTGAGTGCAGGCCAACAGAGCA CAGCTCTCATCTCAGTGGCTAACGTAACAGGGAGTGTCAAGTTCAGTGGACTGAAG CACAGGGAGTATTACGTATCTCCAGACCTGTGGATGCTAGATGGCAACCTAATTAG AGGAATATGAAACAGTAACAGCACCGTGCAATTTCGTTATTCCCTACCTAGCTCTTA TGAGTTATTGTTCTATTATATTAGCAGAAAATGAGGATTGGAGAGCCTTCTCAAG [G, T] GGGCTTACATCTCAATTGCAAGGTGAAAGGCATAACACAAAAAGTTACTTGATAATA |

FIGURE 3, page 104 of 122

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| | TAAAATAAAATAATCAATTCAATTCACTAGTGCAAGACATGTCATGAAAGAAAGATGGGTCAAC TTAGTATCCAGAGATTAATAGTAAATGACTTGCAATTCACTCATTTATTCTCATATT ATTCAATGTCAAAAAATATTGTGAGTCATTGGAACCCCAAAGGGATATGAATAAT AATATAAGCTTTATGAGGGCAAAGGCATCATCTGCTTATTACACTCTATTCCACAGT | |
| 149468 | GGGTGTTGAGGTGGAATACATTAAGGCTGGGGTTTGAGTGCCAGCCAAAGAGCACA GCTCTCATTCTCAGTGGCTAAGCTAACAGGGAGTGATCAAGTCAGTGGACTGAAGCA CAGGGGAGTATTACGTATCTTCAGACCTGTTGAGTCAGATGGCAACCTAATTAGAG GAATATGAAACAAGTAACAGCACCGTGCAATTTCGTTATTCCCTACCTAGCTTTATG AGTTATTGTTCAATTATATTAGCAGAAAATGAGGATTGGAGAGCCTTCAGTCTTCAAGGG [G, A] GCTTACATCTCAATTGCAGGTGAAAAGGCATAAATACACAAAAAGTTACTTGATAATATA AAATAAAATAATCAATTCAATTCACTGCAAGACATGTCATGAAAGAAAGATGGGTCAACTT AGTATCCAGAGATTAATAGTAAATGACTTGCAATTCACTCATTTATTCTCATATTCA TCATGTCAAAATATTGTGAGTCATTATGGAACCCCAAAGGGATATGAATAATAA TATAAGCTTTATGAGGGCAAAGGCATCATCTGCTTATTACACTCTATTCCACAGTGT | |
| 149474 | TGTAGGTGGAATACATTAAGGCTGGGGTTTGAGTGCCAGCCAAAGAGCACAGCTCTC ATTCTCAGTGGCTAAGCTAACAGGGAGTGATCAAGTTCAGTGGACTGAAGCACAGGGG AGTATTACGTATCTTCAGACCTGTTGAGTCAGATGGCAACCTAATTAGAGGAATAT GAAACAGTAACAGCACCGTGCAATTTCGTTATTCCCTACCTAGCTCTTATGAGTTAT TGTTCAATTATATTAGCAGAAAATGAGGATTGGAGAGCCTTCAGTCTTCAAGGGGCTTA [C, A] ATCTCAATTGCAGGTGAAAAGGCATAAATACACAAAAAGTTACTTGATAATATAA AATAATCAATTCAATTCACTGCAAGACATGTCATGAAAGAAAGATGGGTCAACTTAGTATC CAGAGATTAATAGTAAATGACTTGCAATTCACTTATTCTCATATTCACTGATG CCAAAATATTGTGAGTCATTATGGAACCCCAAAGGGATATGAATAATAA CTTATGAGGGCAAAGGCATCATCTGCTTATTACACTCTATTCCACAGTGTAGGCC | |
| 151121 | CTCAGTTTACTCAGAGAGCTATGTGATCTCTTCTCCTCACCTGCATCTCTACTGCTT CCTCTTCCCCCTATACTGTGTCACATGGGCTTCTGTTCTCAAGCTCTCAGTCTT GTTCTGAGCCTCATTCAAGGCCTGTTCCATTCTCTGCTGAGACTGCTTCTT CCTTAGCCTGGCTGGCTCTTCTAGGTTCAATTCTCAGCTCAATGCTAGTGACACA GAGAGGTCTCCGTGACCATCCTGCTAAAATAGTCTGCCAGTCACATCACATCATCCC [G, A] TTTATTTCTTGTAAATTTCGAGCATCCAAATGGCCTTGTATTACATGTCATC TCTCTCCCTCTAGAGCCTAAGCTCAAGAGAGAGAGACTTATCTTTTATCAGTGA TGTATACCCCTAGCACCAGCTTGCTGCTAGCATACACTACACATTGAGAAACTTGTG GATGGGTGAATGATTAGGAGAGAAGATGGAGAGAAGAAACAGAAAATTCAATCTG AGGACCTCACATCCCCAGTGAGTACAAAAGTCTATTACAGGTACTTCACCAAAACAAA | |
| 151984 | TAGCCTCGTATGCAGTACCATCTCATTGGCTTCAATGGCTAGTAATTAAAGACCCATG CTTAATAAAATACACAAATATGACCTGGAGGATGGCTTCTTCCACATCTCTT GCAGCCATCTCAACTGGCCTGGATGAAGAAAGTTCTGTGAGTCCTCAA TGAATCCAAAACCAAAGTGAATGCTACATTGACACATGACACAATGACCTAACCTCC AGCCCGGGCAAGGCCCTGGCAACCTAGTCCCCACCCATCTCCAACCTGTGCCATACCC [C, T] GACCCCGAGTCATACTGGTGTCTGGAGTTCTGTTGTCCTCTCTTATCTGG TGCTTGAGATAAGTGGCTCTTCTATCTAGACACAGGAACAGGTGCTAACACTGTGCC CGGCCCTGCTAAAGGACCCAGTTAACACTGACTATAATAGCAGTTATGATCATTT TGTGGCTGATCCCCATTACTCTCAATCACCTTATTCTTATGTAAAAC ACTGAACACTTGCTTAAGCTGTGAAGGTAGAAAACATGTCCTGTGAATTGTGG 152547 | GTGAAGGTAGAAAACATGTCCTGTTGAGTTCTGTTGTCCTCTCTTATCTGG TAGTTCTGTCCTGCAAAATATCTGTTGAATTACTAATGATAACATTGATCT AGTAATGACAGACACCCCTGGATGTCTCAGAATCCTAAAGTGTGATATTGTTAA GGCTTGGGATGATTATCTATTATGGTAAATTCTGCTGTCAGCATTATCTAC GATACAAGAGATAAAAAGGGATGGACAGGCACTCTTATTGCTCTGAGTGATGGAA [A, C] TGAAGCACATCCCTGATGTTACAACGTTAGAGTAAGATGATGAAGAATGTGATTCCAC CAATAAGGATAGAATTATTCCAGGAGGGAAATGAGTGCTGAAAGTCCCCCATTCAAC ATACCTTGATCTCCCTCCCTAAATGAAAGCTGTCCTGTCACCTCATTATCTGCTATT ACAATGAGGCTGCCACATTCCAGGGACAGGAGCCAAGGGAAATGCGGTGAGAGGC CTTAAATGAAGTACAATAAAAAGGGATTGTTAATGCCAGGAGTCCCCCTGGGAGA |
| 152560 | ACATGTCCTGTTGTAATTGTTGACCCCAATTCTGCAATTAGTTCTGGTC CAATAAAATATCTGTTGAATTACTAATGATAACATTGATCTAGTAAATGACAGA CACCCGGATGTCTCAGAACCTAAGTAATGATATTGTTAAGGGCTTGGGATG ATTATATCTATTATGGTAAATTCTTGATGTCAGCATTATCTACGATAACAAGAGAA ATAAAAAGGGATGGACAGGCACTCTTATTGCTCTGAGTGATGGAAATGAAGCACATCC [C, T] | |

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| | TTGATGTTACAACGTTAGAGTAAGATGATGAAGAATGTGATTCCCACCAATAAGGATAGA ATTATTCCAGGAGGGAAATGAGTCCTGAAAGTCCCCCATTACACACATACTTGATCT CCCTCCCCCTAAAATGAAGCTGTCCTGCACCTCATTATCTGCTATTACAATGAGGCTGC CACATCCCAGGGACAGGAGCCAAGGAGAAATGTCGGTGTGAGAGGCCTTAAATGAAGTG ACAATAAAAAAGGAGTTGTTAATGCCAGGAGTCCCTCCCTGGGAGACAGCTGTCAGGGC |
| 154834 | TTGCAAAGAGGTAAGAAAAGCAGGCTGCAGGGCAGGGGGAGACTGCAGGATCCCAGGA TTTTGTTACAAGGAAATCCAAGAACCTCAGAGACTTACCTGCTACTGGATTGAAAAAGT GCACTGGGGTTGCTAGAATTGACTAAATAACTAAAATATTGTCGAATCAGTAAACATT TTCCAATCAATTAGACTAGACTCTAGAATGTCAGAGTCTGAAAGGGCATTAAGCATTATA GAGATCAAACAATCATTCACAGATGGGAAAGCTGAGGCCTAGGAGAGCGTGGGATTAC [T, C] TAAAGTCATACAAGTACTCTGTAATGATAAAACCAAAAGAGAAATCGTCAGGTCTCTG ACAGCTAGCCTAGTACTTTGTCAGAACCATGTTATCTCTGATTGAATATTGGTT GTGACAGATTCAAAGTAGATATAACCTCACAACACTACTAATTATATTACACATTAA ACCAATGACTGCCCTCTCCACAGGCTTGGGCTATAGGGCTGTCGTCTGTTCTG CTCTCTCTCTTCTTACTCCCTCTCTGTTGCTTAGGTTGGCTGAAGTGT |
| 155118 | AGAGCGTGGGATTACTTAAAGTCATACAAGTACTCTGTAATGATAAAACCAAAAGAGA ATCGTCAGGTCTCTGACAGCTAGCCTAGTACTTGTCAGAACCATGTTATCTCTT CTGATGAAATTGCTGTCAGAACCTCAAAGTAGATATAACCTCACAACACTAAATT ATATTATCAACATTAAACCAATGACTGCCCTCTCCACAGGCTTGGGCTATAGGGTC TGTCTGCTGTTCTGTCCTCTCTTACTCCCTCTGCTGTGCTTA [G, A] GTTGGCTGAAGTGTAGAAATGGCTGACAGTCAGGCACTGAGCAACTCTGGAGGCCAGG GTTCACTCAAGTAAATCCAGGCCAGGCTACCTCCAAGCCATGCTCTTTAGGGAGTAGTG CGTAAATGCACCCCTCTAGCCTAGAGGAGAAAGCACTCTGTTAAGGTAAGAGATGTT GCAGAAGGGAAAATGAGGAGATAATTGAAGGGAAAATGCTCTGGCCCTGTGTGTC TAAGGATTGTTGTCGCTGCCCTGCTCCATTGTCACCCCATCTCACCCCTTCCAC |
| 156897 | GGCTCTGGTAGAGAAGTGATTTGTCACTGAAAACCAAATGCTCTAAAGCTCAAGGCC ATGAAACACCACCTCAGATACCAGGAGGGCTAGAGTGGGTCAAGAGCAAGAATTGTT GAAACCAGAAATCTCAGTAACTAGAAGTATGCAAGCAGATGTTAATGATCACCTGCCAGGT TTCTGAGATGGTATGCTGGTTTCACTGGAGTAGGACAGATGGTTATATGGTTCA CTGCAATCTTAAAGAGATTATGACCTTAAAGCCATTCTCTAGGGACTAACAGAAA [C, T] GGAGACTCACAGTAGACAATTAGGTACCACTGGTTAATTGCAATTCTTATTGCA GCCAAAAGATTTCATAACATTCAAAGTAGATTCAACAAAAAAAGGTCTGGAGGCAA TAGATTGACAAAATCTGGATAAAAATGGTAGAATTCTCACAATCTTATGCA AATGTGAAGTATGAAACTCTAAACAGGGACAAAGTAGTCACCAATTCCAATGTATT GACCAAAGAAGACTTATTGTTAAGGACATTTGCTGGGCTATGTTCATGAAACCTT |
| 157808 | GCAAAGATTATGAACTCTCATCCTATATCATATAGTAAAACAAAGTTAGGAGCTGACTG ACTTGGAGTTAACCATGACCTGGCTTATTAGCATCGTATTAAATTAGAAGTATA ATCAACCACAAACAGGATTGCAACTGCATTGGATTCTACAGAATCGGCCTGTGGGT ATGTTCTCACAGCTAAGTATTACTATGGCTGATAACTGGGGGTCTGAAAATCAGCTA GCAAGATGTACAAGCACAAGTGAACATTAGCAGACAAATGAACACTGAGAGTTAAGGGC [-, G, T] AGACTGGAAAATGACACTGGTTCTTAAACGTGTTAGCAGCAATAGCTGGATTCT TCCGTAGCACCTTTTATGCTTGCCTTAAATTGATAGACAATGTGAGGGAAAGATCGT TAGATTAAGAGTCAGAAATCTGCCAACGTCATATGCTCTAGCTGCTACCTGA TGTTCATTAATTTCTGAGCCTGGTTCTCCCTTAAAGGACCCAGTCATCCCT TTCTAGCCTCAATAGGGTATTGAGAGACCAAGTAAGGTAATAGATGAAAGTGT TTATGTCAGGATGTCACCTGCTGGGCTATGTTAGGAGCTGAGGTTAAGGTTAAGG |
| 159171 | TCTTAATGCAACCATGTCACTCTACAGCTCACTAACGCTTCTGGCTCTGAGTCAA CAATGCAAAGGACCTCAGACTTGGAGTCAGGCAGATCTGGATCTGAAACCTAGGTCT GTCCTCTCCAGCTGTTGACTTGGACAAACCTCTCTGCTCAATTCTGCACTTAT AATGGGATAAAAATTCTCATGCCCTCATTTCTCATGCTATAATGAGGATAAAAACAA TGTCTATCTTAAAGGTTGAAACTGAATGAGAGTACTGAAGTGTTCAGTGCCT [A, G] CAACATAGAAAAACTCAAATTCTCTGTTTAGATGTTATCATCATCATCATCT CCTCATCATAATTCTCATCTCTGGCTTCTAATTCTCCTCTGAAATTAA TCACATTCTCAAATGTTCTATTTCTCTGTTACTCTGTTACTCATGTTATTC AGTTTCTGGAATGCACTCCCTCTCCAATTACATCTGAAATCCTCTCTTGT CAGGATGTCCCTATTCCCAATTCTGAGGGAGCACTCTCTCCAACTCCCATGATG |
| 159465 | GTGCCCTGCAACATAGTAAAAACTCAAATTCTCTGTTTAGATGTTATCATCATCA TCATCCTCTCATCATAATTCTCATCTCTGGCTTCTAATTCTCCTCTGAA TTAACATCACATTCTCAAATGTTCTATACTTTCTCTGTTACTCATG TTATTCCAGTTCTGGAATGCACTCCCTCTCCAATTACATCTGAAATCCTCTCC TCTTGTGAGGATGTCCTATTCCCAATTCTGAGGGAGCACTCTCTCCAACTCC |

[G, A]
TGATTTGTCTTGTACTGTCCTACCTTCTCATTGTATACTAAATAGTCTTGTAAATAATT
TATTCACTACTGGTGTAAACAATAAATGGGTACCGAACAGCTGAAAGGTGAGACAGAG
GAGTACAGTACTGTGTTGCCTGCAGGGAGTCTTAGAAAACTTTGAGTTGGAGAGA
GGTTGTGAAAGTGAATTTTCAGGCAGTTAGGCAGGGCGTCGTCAGATGGGAAGGAGCCA
ACAGAAGAACAGAACCCATTTCCTTGTATTTCTTCAGTGTCCCCACTTTGA

159505 TTTAGATGTTATCATCATCATCCTCCTCATCATAATCTCATCCTCTGGGCTT
CTAATCTTCTCCTTGAATTAACATCACATTCCAATGTTCTATACATTTCT
TCTCTATGTCTTACTCATGTTATTCCAGTTCTGGAATGCACTCCCTCTCCAATT
ACATCTGAAATCCTCTCCTCTTGCAGGATGTCCTATTCCCCAATTGTGGATGG
GAGCACTCTCCAACCTCCCATGATGTTGTACTGTCCTACCTCTCATTGTATA
[C, T]
TAAATAGTCTTGTAAATAATTTACTACTGGTGTAAACAATAAATGGGTACCGAAC
ACCTGAAAGGTGAGACAGAGGAGTACAGTACTGTGTTGCCTGCAGGGAGTCTTAGA
AAACTTTGAGTTGGAGAGGGTTGTGAAAGTGAATTTCAAGGCAGTTAGGCAGGGCTC
GTTAGATGGGAAGGAGCCAACAGAAGAACAGGAACACCTATTTCCTTGATTTCT
CTTCACTGTCCTTCACTTGATGACTCCCTCTCAGACTGCACTATTGCAAGGGTCA

159786 CCTACCTTCTCATTGTATACTAAATAGTCTTGTAAATAATTTACTACTGGTGTAAAC
AAATAATGGGTACCGAACCTGAAAGGTGAGACAGAGGAGTACAGTACTGTGTT
TGCCTGCAGGGAGTCTTAGAAAACATTGAGTTGGAGAGGGTTGTGAAAGTGAATTT
CAGGCACTTGGCAGGCGTCGTCAGATGGGAAGGAGCCAACAGAAGAACAGGAACAC
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[C, T]
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[G, A]
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[-, T, A]
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[-, A, T]
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| | | |
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| | | AGCTATAGATCAGAAGAGAGTAGTTAACATTGAGCACACATTATTTATTTATTTA [G, T] TTAGTTAGTTAGTTAGTGAGACAGAGTTCACTTGTCAACCAGGCTGGAGTGCATG GCACGATGTGGGCTCACTGCAACCTCTGCCCTCCAGGTTCAAGCAATTCTCTGCCCTCAG CCTACCAGGTAGCTGGGATTACAGGTACCTGCCACCATGCCCTGGCTAATTGTAATT TTTTTAGTAGAGATGGGGTTTCATCATGTTGCCAGGCTGCTCAAACCTCTGACCTCA GGTGTACCCACCTCGACCTCCAAAGTGTGGATTACAGGCGTGAAGCCACTGGCC |
| 161415 | | CATGCCCTGGCTAATTTTGTAAATTTTTAGTAGAGATGGGGTTCATCATGTTGCCA GGCTGGTCTCAAACCTCTGACCTCAGGTGATCCACCCACCTCGACCTCCAAAGTGTGG GATTACAGGCGTGAGCCACTGGGCTGCCAGGACACATATTAAACACCTACTGTG TGAGAGACAAAGTATTAGGTATTAAAGATACTATATTGAACATTACAAATTGATCAGC AGTTATTAGGTGACCATTTAGATGCTAGGTTGCACATTAAATAAGCAGTTACTGAGTG [C, T] GAATAAAAACAAACAGCTAATATTATAAAACCTTGCAAGGTGTCAGGCTGTGCTATGTAT CAAACATTCTCACTTAATCCTCATATGACATTAGGAGGTGACATTATTACACAC TTTACCTTGAGAAACTAAAGTTGAAGAGGCTAATGAGCCTGCACAAGGCCATTAGC CATATGTTGGATTGAGCCTCAGATTGTTTTAATCACTAGTTCTACCATCTATGTTCA GAAACACAGTGTCTGATCTCACAGAGTTCAGAGTTGCAGCCAGAGAAACTAGAAC TG |
| 161800 | | AATGACATTATGAGGTGAGCAATTACACACACTTACCTTGAGAAACTAAAGTT TGAAGAGGCTAATGAGCCTGACAAGGCCATTAGCCATATGTTGGATTGAGCCTCAGA TTGTTTTAATCACTAGTTCTACATCTATGTTGAGAAACACAGTGTCTGATCTCACAG AGTTCAAGAGTTGAGCAGAGAAAACTAGAAACTGAGTTGGCAGAAGAGTGGGTTGG GGTAGCCAGGGGAGGTAGGTGCTGATGGAGTGGTGGCCCACAACTCTGACTGT [-, T, C] ATTCTCTTCTACTCATCTGAACATTAGGCTTATCCGTCAGAAAGTCCTGGATACA GCTGTGAGAAGAACTGGCAGGTGACAGCAGTCACATCTGACAACACAGAGGAGGG TACCGGATGCTCTTCAGGACCTGGAGAAGAAAAGGAGGGCTGGTGGTGGACTGT GAATCAGAACGCCCTAATGCTATCTGGGCCAGGTAGTGAAGCAGCAAGGCCAGGGT GGTGCAGGGAGGTGATTCAAGGAATAGCCAGACACACTTGCCTGGTGTATAAGAG |
| 161899 | | ATGTTGGATTGAGCCTCAGATGTTTTAATCACTAGTTCTACCATCTATGTTCA GAAACACAGTGTCTGATCTCACAGAGTTAGGCTTCCAGGACCTGGAGAAGAAAAGGAG TTGGCAGAAGAGTGGGTTGGGGTAGCCAGGGGAGGTAGGTGCTGATGGGAGTGGG GTGCCACAAATCTGACTGTCATTCTCTACTCATCTGAACTTGTGCTTAC CCTGCAGAAAGTCTGGATACAGCTGCTGAGAAGAACTGGCAGGTGACAGCAGTCAC GGTGCAGGGAGGTGATTCAAGGAATAGCCAGACACACTTGCCTGGTGTATAAGAG [T, C] TTGACAACCACAGAGGAGGGATACCGGATGCTCTTCAGGACCTGGAGAAGAAAAGGAG CGGCTGGTGGTGGACTGTGAATCAGAACGCCCTAATGCTATCTGGCCAGGTAGT AAAGCAGCAAGGGCTCAGGGTGGGTGCGGGAGGTGATTCAAGGAATAGCCAGACACACTT TGCCTTGGCTGTTATAAGAGGGTTATAAGAGGGTCTTGACTAGGTGAGACTAAAAGA CCTCTATCTCATTCTATAATTCAACAAATTAAATTCTGAAATAGCACAACAAATGGG |
| 162793 | | CCTTGAACCTGGGAGGTGGAGGTGCACTGAGCCAAGATTGTGCTACTGCAC AGGCCAACAGAGCAAGACTCCATCTGAAAAATAATAAAATAATGATAAATTACAT TCCATTGAGTTATGAAATGTTATCATATTAGGAACACAGCTTATAGGGCAAATT CTGGGTTGCACTCTGACTCATGATCCAGGGTTGGCATCTCATTCTTCA CCTCTTAACGTTGAAAGGCTAAGGAAGCAGCACCTTATTCATTGTT [T, C] TGAACATGCCCTCCCTTGAGAAATCAATTGACAGTACATTCTCTATAACAGGCATT GTAACCTCAACAGTCTTGAGCTAGATCTCTAAACTGTGCTTCCCTGGCTCAA AAAGGCCATGCCACCACAGAAATTAGGATTGTTGAGATCCTTATCTTTAAACTAC ATTATGATTGATTGAGCTAGAGCTAGCAAGGTAGCAGACGTTGCAATAAC TTCACAGTCTGAGCTAGATCTCTAAACTGTGCTTCCCTGGCTCAA AGCAATAGAACACAGACAGAGTTGAATGTTATGGATTCTTAAGGCA ACTGTTCTA |
| 162919 | | TTAGAGTTATGAAATGTTATCATATTAGGAACACAGCTTATAGGGCAAATT TCGACTCTGGACTCTGCACTCATGATCCAGGGTTGGCATCTCATTCTTCA TAACGTTGAAAGGCTAAGGAAGCAGCAGGCCACCTTATTCATTGTTCC ATGCCCTCCCTTGAGAAATCAATTGACAGTACATTCTCTATAACAGGCATT TTCACAGTCTGAGCTAGATCTCTAAACTGTGCTTCCCTGGCTCAA AGCAATAGAACACAGACAGAGTTGAATGTTATGGATTCTTAAGGCA ACTGTTCTA [C, A] CATGCCACACAGAAATTAGGATTGTTGAGATTCTTATCTTTAAACTACATT GTATTGAGATTGAGCTAGCAAGGTAGCAGACGTTGCAATAACTTTGA ACAATAAAATTGATAGTTGAGTACTTGACACATGACA AGAACCCCTGGGGCCCTCACAGAGAACTTGACTAGGACAGCTATTACT CAGAGGCC AGCAATAGAACACAGACAGAGTTGAATGTTATGGATTCTTAAGGCA ACTGTTCTA |
| 162939 | | TCATATTAGGAACACAGCTTATAGGGCAAATTCTGGGTTGCACTCTGACTCT TCATGATCCAGGGTTGGCATCTCATTCTTCA CCTTAAACTGTTGAAAGGCTAA GGAAGCAGCAGGCCACCTTATTCATTGTTCC CTGAACATGCCCTCCCTTGAGAAA |

TCAATTGACAGTACATTCTATATAAACAGGCATTGTAACCTCACAGCTTGAGCTAGA
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 [-, A, G]
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 [A, C]
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 [G, A]
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 [C, T]
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 [T, C]
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 [G, A]
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 [G, A]
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 [G, A]
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 [T, G]
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 [G, C]
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 [G, T]
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 [A, G]
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 CAAAACCAAGAGATGTGGCATAAGAATAAGATGATCAGGCTAACCTGATGCTGAGACA
 172007 TCACTGAATTAGAATTCTAAACCCCTAATAAATTACAACAATAACAATGGCAATA

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| | | ACTTCCACAATTGACTGATTGCTACATTCTAGACACTATGATAAACACTAAATGCATGT CAATTAAACCTTCCAATAGCCTTGAGGTTGATATTATCCTCAGATGAAAGAACAGAGC TTCAGAAAGGTTGACTTTCCACAGTCACAAAACATATAAAGTGTGAGCTGCACTTCT CCTCAAGGGCATGGAATCCAAAATTGTGTTCTTATTACCGTGCCATGTGAGTGTGG [G, A] CAGGGAGAGGTTGGGAAAGAGTCAGGAAAGAGGAGGGGTTGCTGGACAAGACAGCTTG AGTTAAATCTGCTACAGTAGCAGCAATAGATCTGACATCCAACCCAGGCTCTCAA TCCCATTGGACATCTGCTCACCATTTACTCCATGGTTAGGTACTCATATTGGCAATC GCAGTGGCACTGAAGCATTCACTGTTAGTGGCAGTTCCAAAAGTGGCTACAGACA CACACAGAGGTCCACAGGTCTCTGTTGAGAAACACTCATTTGGCTAAGATTGCT |
| 172220 | | CATATAAAGTGTGGAGCTGCACTTCTCCTCAAGGGCATGGAATCCAAAATTGTGTT CTTATACCGTGCATGTGAGTCTGGGCAGGGAGAGGTTGGGAAAGAGTCAGGAAAGAG AGGGGGTTGCTCTGGACAAGACAGCTTGAGTTAAATCTGCTCACAGTAGCAGCAATAG ATCTGACATTCCAACCCAGGCTCTCAAATTCCATTGGACATCTGCTCACCATTTACTC CATGGTTAGGTACTCATATTGCAATCGCAGTGGCACTGAAGCATTCACTGTTAGTGC [C, T] GCATTTCCAACACTGGCTCTACAGACACACCACAGAGGTCCACAGGTCTGTGTTGAG AAACACTCATTTGGCTTAAGATTGCTCTGGTAGTCACAAAGGTAAGAACTACAACTA CATTGATGAAATTATTAAATTATTATTCTAGTGTGACAGAAGCTGAGGAAGAGATG ACGGAGTTAGGCCATTCCAGGTTATCGGGTACTTGGGACCCAGGACAGTGGCATT TCTGCCATGTGCTTGCAAGATTAACCTCTGAGAATGTTAGATTGGAAGTGTGCTATT |
| 172690 | | AGGAAGAGATGACGGAGTTAGCCCATTCCAGGTCTTATCGGGTACTTGGGACCCAGGAG AGTTGGCCATTCTGCCATGTGCTTGCAAGATTAACCTCTGAGAATGTTAGATTGGAAGT TTTAGTCTATTGGCAGCTATTCCAAGCCCCAGCCCATGCTGCTGCTCTGCGGG TCAGCCCTGAGCAGAAACTGTTCTTAGTCCTTGCTCCCTGTGGTAGATAATCTGTC AGCTCCTCTGCAAAGCTGAGCTCATCCACTTCTCAGTGCCTCTCTGTTGGCTC [T, C] GTACCTCACAGTTAGTTAGTTCTGCAAGCTCTGGTAGGCAGGTGGTATAGTAGTTG GGAAGGGTGGCTTGGAGGAGCTCTGGGTTGAATTCTGACTTTATACTTATTAGCTA TGTAACATTAGTCATTTATCCTTTCTGAGTTTGTGCTTATCTTAAAAAAAG AGAATGATATTATGACATTCTATAGGGTTATGAGAACTAAGTGAGATCCCTCAACG CTCTCGGAAATGAAATCACATCTACGTTTATGCTGCCATAGCCCCAGATATTTC |
| 174992 | | AAGTAAGATTCTGGCCCATTATAAGGAGAAAATGAAGTTCAAGTTGTTGAAAAAC TTTGAAAGTCATTGACTAAAAGCTGAAATTCAAACCTAAACCTTTCCATTCTAAGG ATTAGGCTTGTCTCCATTGGGCACACTGCCAAACTGGGAAACCTTGTCAATTCTTA GGACTGGTATTATAATTGAGCAAAGCAAGAAATAAACTCCTTCTCCTAAACTGCC GGGTTGAAATCTGGCTCAGTACTAGCTGTTGTCATTGCAAGTCACCTCTCCT [C, G] TTTGACCTCAGCTGCTCACCTATGAGTGGAAATTAAATGTGGATCTCATAGATAAA GATAAAATGAGTTATGTATGAAAGTTAGAACACAGAGTGCAACAGAAGCCAGGG CTCATCCTAAGTGTCACTACTCATGACCAATTATGCAATCATATTCTGTAAGA TCTCAATTGTTCTAGAATTGGCATAATGTTCAAAGGAAAAAAATCAGCAAACAA CTTCTGCCGTGTGATTAGGGTCTAGTTCTGATTGCTTCAGTTCAGAGGTATC |
| 176676 | | TTTCATCAAAGATGGCATGCTATGAGTATTGCTTGGCTTTCTAGATAGGAAGGT TTGATCATGAAAGGTAGATGCAATTGGTTTAAGTCCACTGGGAACTGTAGCCATAA GGGCCACCTCATACAGGAAATTGCTCTGCTGAAATGGCTTGGCAGGTGT TCCTGACCAACAGTTGGGAGAGTAAAGATGAAGGGACTCTGTGAAAGACCAACTAT TCCCAGGCCAGGTAGTACACCCATGCAGCCTGCACTCAATAGCCAACTGGAGTCC [G, A] ACCTCTGCCAGAAAGTGCAGCATTCTAAATCCAGGGCTGAGAGAAATTAGTT TGTGAGACCTGACTGACATTACAATGCTTGTCAACTATGGTATGAGGTAT GTCTGTTGGTGTGCAAGATCTCAAGTGTGCTCCCTGGTCCAATGTAACTGGAT AACTCAACACAGATGCTTTCTCTCAATATTATGGTGTGTTCACTGATTAAAGCAC AGCTACAATACCTGTTAATTAGAGGAACCAAGACTACCCCTGTGTTACCAAGAGATTA |
| 176723 | | TAGATAGGAAGGTTGATCATGTAAGGGTAGATGCAATTGGTTAAGTCCACTGGGA ACTGTAGCCATAAGGCCACCTCATACAGGAAATTGCTCTGCTGAAATGGCCT GGCCAGGTGTCTGACCATCCAGGACACAGTTGGGAGAGTAAAGATGAAGGGACTCTG GAAGACCAACTATCCCCAGGCCAGGTAGTACACCCATGCAGCCTGCACTCAATAGCCCA ACCTGGAGTCCCTGACCTCTGCCAGAAAGTGCAGCATTATCCTAAATCCAGGGCT [G, A] AGAGAAATTAGTTGAGACCTGACTGACATTACAATGCTTGTCAACTATGGTAC TTGTATGAGGTATGCTGTTGAGATATCCAAGTGTGCTCCCTGGTCCA AATGTAAGTGGATAAGTCACACAGAATGCTTCTCTCAATATTATGGTGTGTTCA CTGATTTAAGCACAGCTACAATACCTGTTAATTAGAGGAACCAAGACTACCCCTGTG TACCAAGAGATTATAGGGAGAGGACACCTTAAAGGTTGGTAAAGTGGCTAA |

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|--------|--|
| 176944 | CCTTGCACACTAACAGCCAAACCTGGAGTCCTGACCTTCTGCCAGAAAGTGCACAGCATT TATCCTAAATCCCAGGGCTGAGAGAAATTAGTTGTGAGACCCCTGACTGACATTACAAT GCTTGTCAACTGGATACTGTATGAGGTATGTCTGGTGTGGCAGATATCCA AGTGTGCCTCCCTGGTCCAATGTAACCTGGATAAGTCAACACGAATGCTTTTCTCT CAATATTATGGTTTCACTGATTTAAGCACAGCTACAAACACCTTGTTAATTAGAGG [A, G] AACCAGACTACCCCTGTGTACCCAGAGATTATAGGGAGAGGACACCTAAAGGTTG GTTGGTAAAGGCTAAAATAGGAAAATGTGAAGACTTTATGCAGAGACATGGTATT TGAGGACACAATTAAGTCTCAGCCCCAGGAGTATTCCACAAATTACACATATCCATATT CATGGCACACATACCTGTGTGATCATAGAATTGTAGATCAAAGCTGGAAGAGCCCTAAGA GAGAAATCAAGTGGCTCAGAAGTTCCAACATTGGTTAGTTGAGGCTCTTTCAAATG |
| 178739 | CTTACTTTCTGGTCTTCTATACCTTTAGGCTGATAATTCCACCTTTAAAAAAATAC TTCTAAATATAAGACTTTCAACACCAGTTCTATAACTACTCTCAATGGAGCTGTC ATCTAAGATTTATCTGACAATTGGGAAACTTGGCATGTTCAACCTGTGCCATTCA GTATACAGTACAAGTTCTTGATTTCTCAACTTACCTCTGTGGATCTCAAGGGGA TGGGATGGAGGAAGTGCTTCCAGTGTCCCAGGATTGTTAATAAACCTTACTTGCC [C, T] GTTTCCTTGAACAATGTTAGATGCTCCTTCTCCTGACTGGTGTGGTGTAGCAG GCAGGATGATGAGGGCTGAACAGCTCGATGTGACCCCTGAAAGAATCCCAGAGCAAAG GAATTCAGCTTGAGATAAGCCTTCATCTCGATAGCTATGTTCTATAACACCTG CTTCATGTTCTCAGGCTCTGCCTGACCCAGTCCCTGTATTGAAGCAGTCTAACAC CCTAACCTTTGACCCAAATGATAATGTTGAGTGTGATCATATAATAGC |
| 179524 | ATTGCACGTGATAATTAATAGTCATAATGATGGCCCAGAGCCTTCAAGATTCTTAAAG CATTCTCCAAATCTCACAGCAAGATGAAAGCATGTCATGTTAGTTGTTAAACA CCTCTTAGGATATCATAATTACTGAAATGCCCTTCTAATCTAATCCTTGAAAATTAT AATTGGCATATGATAGATGGAGTACTATATTAACTAGTTACTTAATTGAGCGCATT CTCCCCATATTGACTCAAATGCCCTTCAACATTGTGTTACCTCTACAGTGGATATA [G, C] AGAGGAGACAGATTCTGTTCTCAACTAACTCTCACCGCCATATAACCTTAAGCCACT ATTCCCTCTTGGCCTCAGTTCCCTATCTGACAATATGAGGGTTTGTGTTACCTC CTACAGTGGATATAGAGAGGAGACAGATTCTCAACCAATCCTCTAACTGGCCATA TAACCTTAAGCCACTATTCCATCTGGGCTCAGTTCCCTATCTGACAATATGAG GGTTGGTCTCTCCTCCAAAATCTTGCTCTGTATAGGTCAAAAGTCAGCAAACATATGG |
| 179726 | TGACTATATTAACTAGTTACTTAATTGAGGCCATTACTCCCCATCATTGACTCAAAT GCCCTTCAACATTGTGTTACCTCTACAGTGGATATACAGAGGAGACAGATTCTGTTCT CAACTAATCCTCTCACAGCCATATAACCTTAAGCCACTATTCCCTTTGGGCTCAG TTTCCCTATCTGACAATATGAGGGTTTGTGTTACCTCTACAGTGGATATAGAGAGGA GACAGATTCTATTCTCAACCAATCCTCTAACCTTAAGCCACTATTCCC [A, G] TCTCTGGGCTCAGTTCCCTATCTGACAATATGAGGGTTTGTGTTCTCTCCAAAAT CTTGTCTCTGTATAGGTCAAAGTCAGCAAACATGGTCCCTGTGTCACATCCAGCCAT CACCTGATTTATGGCTCATGAGCTAAGAATGATTTCACATTTTAATTGTTGGG AAAAAAATCAAAGAATGATTTTATAATATGGAACATATGACATTAATTACCAT GCCAAAAATATTGGGACAGCCATGCTTCCAAATTACTATGCTAAATAGTAATAGTA [G, T] TTGGGAAAAAAATCAAAGAATGATTTTATAATATGGAACATATGACATTAATT ACCATGCCAAAATATTGGGACAGCCATGCTTCCAAATTACTATGCTAAATAGTA TAGTAATTACTATTCTATATATGGCTACTTCATGCTGCAATGGCAGAGCTGACTAG TTGTCAGAAGAACCATACTGGTTGCAAAGCCCTAAATATTATAATCTGCCCTTACAT AAAAAGTTGCTGACCCCTGCTAGATGTGGAATAGGGGACACTAATAGGCTCAGAT |
| 179901 | CTCAGTTCCCTATCTGAAACATATGAGGGTTTGTGTTACCTCTACAGTGGATATAGA GAGGAGACAGATTCTTCTCAACCAATCCTCTACAGTGGCCATATAACCTTAAGCCACTA TTCCCATCTGGGCTCAGTTCCCTATCTGACAATATGAGGGTTTGTGTTCTCTC CAAATCTTGCTCTGTATAGGTCAAAGTCAGCAAACATGGTCCCTGTGTCACATCC AGCCATCACCTGATTTATATGGCTCATGAGCTAAGAATGATTGTTACATTTTAATT [G, T] TTGGGAAAAAAATCAAAGAATGATTTTATAATATGGAACATATGACATTAATT ACCATGCCAAAATATTGGGACAGCCATGCTTCCAAATTACTATGCTAAATAGTA TAGTAATTACTATTCTATATATGGCTACTTCATGCTGCAATGGCAGAGCTGACTAG TTGTCAGAAGAACCATACTGGTTGCAAAGCCCTAAATATTATAATCTGCCCTTACAT AAAAAGTTGCTGACCCCTGCTAGATGTGGAATAGGGGACACTAATAGGCTCAGAT |
| 180348 | GCTACTTTCATGCTGCAATGGCAGAGCTGACTAGTTGTGACAAGAACCATATGGTTGCA AAGCCTAAATATTATAATCTGGCCCTTACATAAAAAGTTGCTGACCCCTGCTAG ATGTGGAATAGGGGACACTAATAGGCTTCAAGATAAAACTAGACACTTGGAAAGCATTAA AGACCCCTAGGAGGTTAGTGTCAAGGAGAGGAACCTAGCGCAGTCCCACAAATATTGTT CAAGAAAGACAGCTACATTGAAAGGCCCTGCTGGCAGGGTACATATTCTGGCTATT [A, C] ACTGTGCCAGCCACAGTCTGAGGTTCAATTGCTCTTGTGAGCAATCTGACACA CCATCTAAAGCTAAAGTCATACTGTTCTCCACTGGTGGACAGTAGAACACATTGTA AGAACAGAGATTATAGTTGGAACCTAGTTGAATTCTGCTTGCTGTGATCTCAGG GAAATTCCAAGGTCTCTAACCATAGCTCTAACAGAAAATTAGGATGGATACTCAC TCACCTATTATGCAAATAAGTATTGGGTGCTACTGTGACATATTACCTTGGAAATTG |

180459 CTTGCATAGATGTGGAATAGGGGACACTAATAGGCTTCAGATAAACTAGACACTTGGAA
 ACCATCTAACAGCCTTAGGAGGTTAGTGTCAAGGAGAGAACCTAGCGCAGTCCCACAA
 ATATTGTTCAAGAAAAGACAGCTACATTGAAAGGCCCTGCTCTGGCAGGGTACATATT
 CTGGCTATTAACGTGCCAGCCACAGTCTGAGGTTCATTGCCCTCTTGCTGGAGCAA
 TCTTGACACACCACCTAAAGCTAAAGTCATATGTTCTCAGTGGTGGAGCAGTAGAAC
 [A, G]
 CATTGTGAAGAAGACAGATTTATAGTGGACCACAGTTGAATTCTGCTGCTGTG
 GATCTCAGGGAAATTCCAAGGCTCTAACCATAGCTCTAACAGAAAATTAGGATG
 GATACTCACTCACTCATTTATGCAAATAAGTATTGGGTGCTACTGTGCACATTTACCTC
 TTGGAATTGTTAAGTAATTAAAGGATTATGTATATAAAGCATTAAACAGAATGCCGTGAC
 TCAGGAATAGAGCTGGAAAATGTTAAACATCTCAAACAAATTATTCTTTGTT

 180786 GTTGGACCACAGTTGAATTCTGCTGCTGTGATCTCAGGGAAATTCCAAAGGTCT
 CTTAACCATAGCTCTAACAGAAAATTAGGATGGATACTCACTCATTATGCAA
 TAAGTATTGGGTCTACTGTGACATTTACCTCTTGAATTGTTAAGTATTAAAGGA
 TTATGTATATAAACGATTTAACAGAATGCCACTCAGGAATAGAGCTGGAAAATGTT
 AAAATACATCTCAAACAAATTATTATTCTTTGTTAAATTACAGTAACCTCAAACCT
 [C, T]
 TAAAAAGCTGTTGAATAAAAGTTATATAATGCATACAAAGGGCATTAGGCCATTATT
 GTCATTTGTTCTATAAGCAATGCTCTGAAGCCGTTTCAGTGGAGCCTAACAGC
 ACCAGTGTGCTTAATTTCAGGCCAGGAGATAAAAATTAAAGCAGGGCTCTTAAAGA
 CCATAACAAAGCTCAACAAATGCAACAACTCTCTCCCTGCTTGCCACTGCTACTCT
 GTCCCCCAGTGGACTATGGATGATCTAAGATACTAGAGCTATCTGAGGA

 181129 GCATTTTAGCCATTATTGTATTTGTTCTATAAGCAATGCTCTGAAGCCGTTTC
 AGTGGAGCACCTAACAGCACCACTGTGCTTTAATTTCAGGCCAGGAGATAAAAATTAAAG
 CAGGGCTCTTAAAGACCATAACAAAGCTCAACAAACTCTCTCCCCCTG
 TCTGCCACTGCTACTCTCCCCACTTCCAGTGACTAATGGATGATATCTAAGATA
 ATTAGAGCTATCTGAGGATGATTATTATTAAATAGTATTAAAATACAATATTC
 [A, G]
 CATGATAAAACAGATATTACAGAAGGGTATAAAAGTAAAAGATAATGCCATTCTTCCA
 ATTCTATACTTCATAGAAGTAACTATTAAACCCCTTCTGCATTGGTTATTAAATG
 GTTTCTTTACACTCTACATCATATATTATGTTCTTCTGCTTATCAACTTA
 ACTCCATATCTGACTTCCATTAGAAAGATGACAATCAGCTCATATTACACCCCAACA
 TCCCCCTCTCAATGTTGTTAGCCTATATGCTATTATTGAAATTCTCTGATGATTACC

 181918 GGTCAATTCTTGCATTTAATAATGACAGTAGACACAGCATTCTCACCGATTAT
 TAGTCACACATGGGAATGTGAAATGCTACATAGGTGCGAGAAGCAGACAAGAAC
 AGTGCCTAATAGGCCCTAGGAACACTCACTCATACCAAGCTCATTAGGTGAGAAACAG
 TCACTAAAGAGAACATCTGTACAGTGTGGAGGTCACTGGAAAGGAGGTGGGTT
 AGACCTGCATTCTGTGCTGAATAGCTGGAAAACACTTGACTAACCTGAAACAAAGTA
 [C, T]
 TCTGAGATTAAATTTCATTTTTGTCAGTAGTAAACAGTATATAGAGCAATGGTCCC
 AGCAATTGGGAACATGTTGAAATAGGCAAAGTGGCTCAAAGAGAGTAGTAATCAAACCT
 CGTAGTAAATTAAATAGAATATAATTAGCAATGTTAGTATTAAATATAACTATA
 TAATTAATAGCACAATAAGCACATAAGAAAAATGTTCTAATTACAAATATTACCT
 CTAAGGTTTTAAATAAAATGCCAAAGAAAATTAGAAAATTATTAATTAACACCTTAT

 181936 TAATAATGACAGTAGACACAGCATTCTCACCGATTATTAGTCACACATGGGCAA
 TGTGAAATGCTACATAGGTGCGAGAAGCAGACAAGAACACTGACCTAATAGCCCTA
 GGAACACTCATACCAAGCTCATTAGGTGAGAAACAGTCAGTCAACTAACAGAGAAC
 CTGGTACCTGCTGGGAGGTCACTGGAAAGGAGAGTGGTTAGACCTGCAATTGTG
 TGAATAGCTGGAAAACACTTGACTAACCTGAAACAAAGTACTCTGTAGATTAAATTCA
 [-, T]
 TTTTTTTGTCAGTAGTAAACAGTATATAGAGCAATGGTCCCAGCATTGGGAACATGTT
 GAAATAGGCAAAGTGGCTCAAAGAGAGTAGTAATCAAACCTCGTAGTTAAATTAA
 TAGAATATAATTAGCAATGTTAGTATTAAATATAACTATAATTAAAGCACAAATA
 AAGCACATAAGAAAAATGTTCTAATTACAAATATTACCTCTAAGGTTTTAA
 AAATGCCAAAGAAAATTAGAAAATTATTAATTAACACCTTATTAATGAGAGTCCCAGG

 183558 GCATTGCTCTAGGAGCAGGTTCTAGGACACATCAGTGACCAAGACAAAAAAGGTTCTGC
 TCTTAGGAAACTGACATTCAATAGGAGGAAAGAGGCTATGGAAACACATGAGTAACAA
 GATAATCTCAAATGGTATAAAAACCTGGAGAAGCTCAACAGGGCACTGAGATAGAGC
 AGACTGGTAGGGTCTGGGGTAACCTCACTATGTTCTCAGAAGCAGTCCCTGAAA
 CAAGGATTCAAGTACAAGGGCTCTGGTGCCAATCCTAAAAACCAAGGGAGGGAGG
 [C, T]
 AGAGAAGGAAAGTGTGCTACAAAGTTCAAAAGATGCCACTACGTGAGGCTACTG
 AAGGAGAACAGTCCCTGAGGGGATCCAAACATGTCAGTGTAGAAACTCACCTCAGGGTCA
 GCCATGCAAGGGAGAGGATTCTGGGCACTTACTGACTCTCATCTGATT
 GAAAGCTGCTCTGGGATATTAACATCTAACATGCTAACCTAGCCTGAGGTAGGCG

| | |
|--------|--|
| | GAGTAGCCAGGTGTTGCAGTGGTACGTAAAGTAGAATACCCATGTAGAAAGGGGAGTG |
| 184778 | TTTCTCCTGCTGGCAGGCCCAATTATACTAAAAGAACCCAAGTTAACACAAGGC TCTATGTGACCAGCTTGGCTGCCAATTGACCTCCTTCCCACCCCTTCTTCAAAC TCACTGTGCCACAATCACACCAGCCTCTTACTGTTCTTGAATATGCCATCATCCTCT CACCTCTGGCCCTTGCTCAGAAATGCTCTTCCAAATATCCCCATAGCTCAGACACAGG CATCACCTCACTCAGGCCAAAGACCACCTCCTGGGAGGCTCATCCTCATCA [C, T] TCCTTCAAAGCATGACACTGCCCTCCCCATCCTCTTACCTCACTTATCCTCATGGG GCTCATTGCTACCGCAGAGTATACTATCCCAGATTATACTATACTATGCTGCATATTAC TTGTTCATTTATTGCTGTCTCCCCACTAGAAATATAAGCTCATAAGGGAAAGAAACTTG CTTATTCACTATTAGAATAGTGCACATGACTTTCAAAAATGTTGTTGAAATGATTA ATCAGTGAATAAGTGAAGTGACTGAGTGAACCAATGCCTAACAGAGGCCCTAGTTC |
| 185666 | GGCCTCATGGAGTGGTAAAATTACCCCTGTTGATGGAAAAGAGCACAGGGTGAGGATG GAGACTGGGATCAGAACTCGGCCCTTCCACAGACTTGCTGTCTGGTAACTCAT AGGAGCTTGGCCAGTGAATTCACTGCTCTCTCTCAAATGGTTGGGATTGGGATG GTAGACGAGATTATCCCTCTTAGAGGTTCTACCTGTACTATATATCTGCATCATCA TAATAATCACAGCCACTATTATTGATCACTGGTCTGCCCATGCACTTGACATGTGTC [A, G] TTGATTGTAITTTACCCCAACCAACCAGACCTCCATTATTCAGACAAGAAAATGTCAA GTAACCTAGTTAATAGTGGTATAACTACTGGCTTATGCATAGCAGCGCCAGCCTCCAA CTAGGCATACTGGCCTCTGAGCTGCTAATTGTCACAGGAAACTAAGTAATAATCAAGT TCAAGGAAAGGAGGCCAACTGTCTCTCCATTGAGTAGGTTCATCTGGTGAACGTGAA TGGAAATCCTGTGGTTTGGAACAGGTTAAGTGTATTATCCAGGCAGCATGTTCTAAC |
| 185832 | TGGGTATTGGGATGGTAGACGAGATTATTCCCTCTTAGAGGTTCTACCTGTACTATA TATCTGCATCATCATAATACAGCCACTATTATTGATCACTGGTCTGCCCATGC ACTTGACATGTGCTATTGATTGTTACCCAAACAAACGACCTCATTATTCA CAAGAAAATGTCAGTAACTTAGTTAATAGTGGTATAACTACTGGCTTATGCATAGCAG CGCCAGCACTCCAAACTAGGCATACTGGCTCTGAGCTGCTAATTGTCACAAACT [A, -] AGTAATAATCAACTCAAAGGAAAGGAGGCCAACTGTCTCCATTGAGTAGGTTCAT CTGGTGAACGAAATGGAAAATCTGTGGTTGGAACAGGTTAGTGTATTATCCAGG CAGCATGTTCAAATCTCCCTCTCCCTCACAGGGCTCATGGACATTGACTTAA ACAATTCAAGGAGAGTGGCGCCAATGTGACAGGTTCCAGCTGGTAACACAGACA CTATTGGCCAAGATCATGCAGCAGTGGAAAGAATAGTGTATGCTCGAGACACACAGGG |
| 187287 | CTGAAGTCAAACCAAGATAGCTGACAGTGGCCATATGGAAACCTGTGTTGAGAAGGATA TAAGGCCAAGTTTATCTGGACAAACAGTGAATCTTGACAGACTTCTCTGCCAC TCAATCATTCTTTTATAATGCCAAACCGTATAACGGAGATACTTCTTATCCACTA TTCAAACTGATTAACTCTCAATAATGAAGACTTATTCAATATGATCTTAAGCAAACA AAATCGCAAATATGCTTCAGCAATGAGAAAACATAGGAATTAAAGTAATGT [C, T] AATGATTGCACTCCAATTCCAAAAGACTGAGCAGATGACAAAAATAACCAAATGTAATT TAATTTTTTTTTTGAGATGGAGTCTGGCTCTGTCAGGCTGGAGTGCAGTG GCATGATCTGGCTCACTGCAAGCTCACCTCCGAGTTCACGCCATTCTCTGCCCTCAG CCTCCAAGTAGCTGGACTACAGGCACCCGCCACCGCTGGCTAATTGTTGTTATT TTTACTAGAGATGGGTTTCACCGTGTAGCCAGGATGGTGTGATCTCTGACCTTG |
| 187351 | GCCAAGTTTTATCTGGACAAACAGTGAATCTTGACAGACTTCTCTGCCACTCAA TCCATTCTTTATAATGCCAAACCGTATAACGGAGATACTTCTTATCCACTATTCA AACTGATTAACTCTCAATAATGAAGACTTATTCAATATGATCTTAAGCAAACAAAAT CGCAAATATGCTTCAGCAATGAGAAAACATAGGAATTAAAGTAATGTGCAAT GATTGCACTCCAATTCCAAAAGACTGAGCAGATGACAAAAATAACCAAATGTAATTAA [T, -1] TTTTTTTTTTTTTGAGATGGAGTCTGGCTCTGTCAGGCTGGAGTGCAGTG GATCTGGCTCACTGCAAGCTCACCTCCGAGTTCACGCCATTCTCTGCCCTCAGGCC CCAAGTAGCTGGACTACAGGCACCCGCCACCGCTGGCTAATTGTTGTTATT GTAGAGATGGGTTTCACCGTGTAGCCAGGATGGTGTGATCTCTGACCTTG ACCCATCTCAGCCTCCAAAGTGTGGATTACAGGCGTGAGCCACTGCCCGCATGT |
| 187706 | TGGCATGATCTGGCTCACTGCAAGCTCCACCTCCGAGTTCAGGCCATTCTCTGCC AGCCTCAGTAGCTGGACTACAGGCACCCGCCACCGCTGGCTAATTGTTG TTTTAGTAGAGATGGGTTTCACCGTGTAGCCAGGATGGTGTGATCTCTGACCTTG TGATCCACCCATCTAGCCTCCAAAGTGTGGATTACAGGCGTGAGCCACTGCC GCATGTAATTAACTTTAAAAAGAAGTGAAGAGAATTAAATTAAAAATTAGAAAA [C, T] ACCCATTCTGGCTCTCAATTCTTATTGTGAACCTGGAGTGTGCTAGGCAACATAAT AAGTATTAGGAACAAATTAGTGAAGAAAACAGACATAGGTTCAAAGCCAGGATATT TCCTGGACTGCTCTCTGATTGTTCATCCACATCCTAGTCCCCTTTGTCAGGAGA |

FIGURE 3, page 114 of 122

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| | GGGTATAATTGATAGTTGTTGAGAAAGAATGAGGGGAAAGTTACAGGATATAAACTT ACCACTTAGGTAAGCCATATGTGAAAAAAATTAGGAGCTCACCTTCTTCATTTCTT |
| 188282 | AGCTCACCCCTTCTTCATTTCTTTGCTTTACTTTACAAGAGATGAAAGAGTTAAT CGTTCCCTTGTTCCAGCTGACTGTAATGCCGGATAAACCAGCTGATTTTCAT GAACGTATCCACCGTGCAGATGTTATATGTAATCTATGCATTTTCCCAAATGAAC CAACATTTAAAATGCAAGATTGACACAGAAACCTAGAATCCTGGCTCTCTCAA AATTAACTGGCAGTACTGAACCTCACAGTTCAAGGAGGTACAGTACTAGCATGGTC [A, G] AGCAGCAGCACCCATCTGCTGAATATTATGCTTCAGGGACACCATCCCTGATTCA CACTGCTGCCAACGATACCATGCATCTGCCACTGCACACCCCTCTCATCACCAGA AAACACATCCCAAATACAGCACCCAAACCTGCCCTGTGCTAGCTCTTGTACCTA ACTGCTCATTCTCCACTAGTACACCTCTGGCTCACCTACGATGGGTGAAGGTGA TGGCTGAGGTTCCAGAGCCTCGGGAGGCAGAGAATTGATATCTGCCGGGGAAATG |
| 190074 | ACTTTCACAACCAGGAGAAAGAGATGCTGAAGGAACCTCACAGCTGTTCTCAGCCCTG ATGAGTGCCTTCTGTAGAGAAGAATATGTAAGGTCTGCTCTTGAATGAAGCTAACGAG GATTCTACTAGCTACATGAGGAACATGCTAAGGAGGACCTCCAGCTGCCATTCTGCC TCCCCTGGTCCCTGTGAGGGTGGCTCCAAGTCACTAGGCAGCAACAACAGACACCAGG CAGTTCCAGGGAAAATTGCAAAATGGACAGTGCCCTGCCCTTACCCCCACC [C, T] CAGCTTATTAAAATGCTTCCAGACTCCACAGTCGAGACAGATTCTGTTGAATGTG AGGCTGGTTCAAAAGTCCCAGAGATTGCTCTCAGCTTCAACCCCTCCAACCTCC TGCCCTCCCATCTTAAATGACGCTCTGAAAGGATAGTCTGATGCCACCATGACAGTGTG AAGCTGGGAGGCAGTTCAGGGTGGCAGGAAGGACTCTGACTGGGAGGCAGGAGCTG GACTCCACGTCAGCTGGCCCTGGCTCTGGATGACCTGAAACATTCACTAGCTC |
| 193266 | TGGATGGGGATGTCATGATACCCAGCAAGAGACAGGGTAGGGTAGGGTACAAGAAAGG ACTTGCACATGTACATGGCTGTTAAGGAATTAGGGATAGAAGAGCTGGTCCAACC GTGGCTCACGCAAGACTATCTGGGGATCTGGACTAATTGCTTGCTTCCAGATCT GGATTCTCTGCTCTAAACAGACATAATCCTCTAGTGCTGCCCTCTGACTGGCTT GTCACAGGGCTCAGAATTAAAGAAAGCATCGTGTGGCTGTGGCCAAGCATCGTGGTT [A, G] CCTGTAATCCCAGCACTTGGGAGGCTGAGGTGGGAGATCACGAGGTAAAGGAGTTGAG ACCAACCTGGCAACATAGTGAACACCTGCTCTACTAAAATACAAAAAGTTAGGGGA TGTGTAAGCAGGCACCTGTAATCCAGTACCTGGAGGCTGAGACAGGAGAATCACTTGA ACGCAGGAGGAGGGTACAGTGAGCGAGGTTGCTCACGATACACACACCAGCTG GGTACAGTGTGAGACTATGTCAAAAAAAAAAAGCATCATGATGTGTTCTTGA |
| 193763 | TTACAGTGAGCCGAGGTTGTCACATGCATACCACACCAGCTGGGTGACAGTGTGAGAC TATGTCAAAAAAAAAAAGCATCATGTCATGTGTTCTTGAACCTCAGGGAAAGCTGC ATGAGACAGTCAGGACAGAAGTATTCTCCATGACTCAGGTAGGAAAGTGAAGCTTAG GAGGTTCTGAGATTGCTTGCCAGAGTACCTAGAATGTGACCCAGAAGGACCTAGT CTACAGGCTCACGCCAGTGAACATCAGGAGGAAGGATCCACCTGAGGGCAACTGCAA [G, A] GGGGATAACAGGAGCCCTCGCTCAGTTGACTGCTCGGCTGTCTCCTCAGGACTGCC TCAGGATCCAATGAGGGCAGGGAGAGCAGTCACTGTTGACACCTGACAAAGATTCTTG CTTGACCAAACCTTAGTCAGGCTCTGTAACCTCTCCTAGGCCATCTGTGCAATTCTG TGAAATCCAGTTGGCAAAGAACACTGCTAAGTCGTTAGCAAGAACCTGTCCAC GTCCACCCCTTTGCCATGATCATCTCTTCAGCCCCACCATCCCCAGATTATGTGG |
| 193782 | TGCCACTGCATACCACACCAGCTGGGTGACAGTGTGAGACTATGTCAAAAAAAAAAA AAGCATCATGTCATGTGTTCTTGAACCTCAGGGAAAGCTGCATGAGACAGTCAGAGCAA GATTATTCTCCATGACTCAGGTAGGAAAGTGAAGGCTAGGAGGGTCTGAGATTGCT CTGCCAGACTAACGAAATGTGACCCAGCAAGGACCTAGTCTACAGGCCCTCACAGCCAG TGAGCATCCAGGAGGAAGGATCCACCTGAGGGCAACTGCAAGGGGATACAGGAGCC [C, T] GTCAGTTGACTGCTCGCTGTCTCCTCAGGACTGCCCTTCAGGATCCAATGAGGGCA GGGGAGAGCAGTCAGTGTGACACCTGACAAAGATTCTTGCTGACAAACATTAGTCA GGCTCTGAAACCTCTCCTAGGCCATCTGTGCAATTCTGTGAAATCCAGTTGGCAA AGAACATTGCTAAGTCGGTTAGCAAGAACCTGTCCACACGTCCACCTCTTGCCATG ATCATCTTCTCAGCCCCACCATCCCCAGATTATGTCGATCATCTCGTCCATCTC |
| 194094 | CTGCTCGGTGTCCTTCAGGACTGCCCTTCAGGATCCAATGAGGGCAGGGGAGAGCAG TCACTGTTGACACTGACAAAGATTCTTGCTTGACAAACATTAGTCAGGCTCTGAAAC CTTCTCCCTAGGCCATCTGTGCAATTCTGTGAAATCCAGTTGGCAAAGAACCTGCTA AGTCGGTTAGCAAGAACCTGTCCACACGTCCACCTCTTGCCATGATCATCTTCT CAGCCCCACCATCCCCAGATTATGTCGATCATCTCGTCCATCTC [T, C] CTTAGGCCATTAGCCAGAAATTCTCTTAACCCCGATGCTGCTGTTAGCAATTCTTA TCCACTGACCCCCACCCCTGCTCTGGCTATATATTCCACGGGCCATGCTTATTCA |

FIGURE 3, page 115 of 122

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| | AGTTGAGCCAACTCTCTCCACCTCTGCAAGACCCATTGCAGGGTCTATACCTATT GCTACGATTCTGAATAAAGTCTTCACTGTGCTTAACAAGTGTGCTGATTAATT TCTTTAACACAGCTGAAGTAATAGAGACATTAACCCGCAATTCTCAGCACCAAGCAGGA |
| 194499 | CCCATGCTCTATTAGAGTTGAGGCCAACTCTCTCCACCTCTGCAAGACCCATTGCAGG GGTCTCTATACTACCTATTGCTACGATTCTGAATAAAGTCTTCACTGTGCTTAACAAGT TGCTGATTAATTCTTAAACACAGCTGAAGTAATAGAGACATTAACCCGCAATTCTC TCAGCACCAAGCAGGAAAGGAAATATGCTCAGCCTCCCATCAGCAGCAGACTCTGAG CTGGCACCCAGTACCCCTTACAGGAAGCCAAAGGTTAATTCTCATCTTCATGGAGGG [G, A] TTGAGGGCGCCAGGATGGCGACAGAAGTTCCGGAGCAGGAACCAAGAAGAAGTGCCTGG GCTCCATCAATGCTACCTCAGACACCCTGGGATGGGGAGAGAGGGATAAGTGCCTCAG TCCCAAGCTCAGACTGATGGATGGGGACAGTGGTTCAAGATACACATTCTGAGAAAG CTTCTCTCTGTCCTGAGTCTGACTCTCTTGATAAAATGGTTGGGCTGAGCCATT CTCTTGAACCTCTCTGCTCTGCCATCATGGAATGGTGTGTTCTGGGATGTCCTTCGCA |
| 195249 | TGTGAAACAGGAAAAATAACGTCTGCTCTGGTACTCACTGGGTTCTGTGAACATGAAA TAAGCAGCTCTTGAGATCACCGTGACAGTGCAAGGGGTCTTGGGTCACTAGAACCTG TGCAGGTAGGACCTTGACCTTATTGAAACTGAGGAAGGGAGTAAAGTGTCACTGACA TGATCCTCTTCTCTGAAAGAGTCCCCTGCTTAGACAACCTACCAGCCCCAAGGCC TCAATTAGATTATTCTACATACTTTACCCACTCTACACAGCACAGTAGTAG [T, C] CGTCATTATCATCATTATTATCATCTAAATAATAAAACTATGCAATTGAAAACCTATGTC CCAGACAATGTGCTAAGTACTCTTGGAGGAGGAAACTAAGAACGAGATAGTTGAGCAA GGAACCTATGGTCATACAGTTAGAATGAGCAGAGCACACCTGGGAAATGCCAGCAGCA ATAGCAGAAAGCAGGTAGAAACACTACATTGCACTTTGTGTTGTCCTCTGAGGCC TAGCACAAATAGCACTGGCTGTGTTGGCGAACACTTGGTACCTTAAGTGAAGATAACCA |
| 197371 | TTAAGATAAAAAAAGGGCAGAGATTGGAAACTGAAGGCTTAGAGAGCTAAATTGCT GAGGGCACTTGGCTATTAGGATTAAGCTGGGTTAAATCCAAGTCTTCATTGCCAAG TATTATTCCCTGGACTCAGGAATAAAGAAGAAATTCTTAAAGGAATTAGAACGCCATC TCCAAGCATAGCTTAAGGCTCATTCTAAAGCTGGCTCTTGTCTGGTCTTGTACT CATTAGTGTGGTGCACCATTTCTTCTTGCAGGCCCCCATACTTCTTCATCTC [A, G] GATGTGTATCTGAGAAGGGCAGTGGTCATAGTGGTGTGATGGGAGGTGTTGGTAG GGATGGTGCAGACATTTCACATAGTATGCACTCTGACCCATTGTTAGTATTGCTAA GAAATAGTAAAACAATTGTCAGGATGAATCCAAATTAGGGAAAGAGATCTGTAATG CATCCCTGGCTGTGGCAAGGGAGTGAAGAGTTTAGCATTCAAGGATACTCCAAGACATC ATTCCATGGAACACTTTGGTCTGAATTCTACTTCAGTGGAAAAGCAAACACACAT |
| 198021 | CGATTGAGGTTAACAGGAAACGTGCAGTTAATGAGAAAGGACGCCGACCAACTAC ACGCTCCACGTGATTGAAATGAAACATGACGGCATCGAAAGTAAGGCCCCCTTACT TCTGTTCTGAGAGAGAGGCTGAGCAGGGACTCTGGCAGAGCTGAGGGCTGTGAG TCCACCTTTCTGACTGGATCTTGAAGAAACTCAGACAACACAGATTCTAGACTGGC TCTGCCACTAACCAAGCTGGACATTGGCAAGTCTCGTTCTCCTCTGAGAATCCATTCA [T, C] TCATTGCAAATAAGTTAAAAAAATCTACATTGTCCTCAGGATGCTGTGAAAAT CCAAGGTAGAGGAAAGCATTCTAAACATAAGAATTGATGTGTTAAAATGCCACTC CCATCTCTGAGGGTTCTAAACTAAGAATTGAGAATGATGATTATTGATGAGGTTAATC ATCTCTCTCTAATCGATAGTGGTCATATCCACTCTATTATTATACAAAAGTAAGGGTG AAAATATATATGTTACATATATGTATAATGTTGATGAAATTCTTA |
| 198039 | GGAAACGTGCAGTTAATGAGAAAGGACGCCGACCAACTACACGCTCCACGTGATTGAA ATGAAACATGACGGCATCGAAAGTAAGGCCCCCTTACTCTGTTCTGAGAGGAGAA GAGGCTGAGCAGGGACTCTGGCAGAGCTGAGGGCTGTGAGTCCACCTTCTGGACTG GATCTTGAAGAAACTCAGACAACACAGATTCTAGACTGGCTCTGCCACTAACAGCTG GGACATTGGCAAGTCTCGTTCTCCTGTGAGAATCCATTCAATTGCAAATTAG [T, A] TTAAAAAAATCTACATTGTCCTCAGGATGCTGTGAAAATCCAAGGTAGAGGAAAGCA CTTCTAAAACATAAGAATTGATGTGTTAAAATGCCACTCCATTCTGAGGGTTCT AAACTAAGAATTGAGAATGATGATTATTGATGAGGTTAATCTCTCTCTAATCGATA GTTGGTCATATCCACTCTATTATTATACAAAAGTAAGGGTGAAAATATATGTTACA TATATGTATAATGTTGATGAAATTCTTAGAATAGCATTCAAATTCT |
| 198143 | TGTTCTGCAGAGAGAAGAGGGCTGAGCAGGGACTCTGGCCAGAGCTGAGGGCTGTGAGTC CACCTTTCTGGACTGGATCTTGAAGAAACTCAGACAACACAGATTCTAGACTGGCTC TGCCACTAACCAAGCTGGACATTGGCAAGTCTCGTTCTCCTGTGAGAATCCATTCA CATTGCAAATAAGTTAAAAAAATCTACATTGTCCTCAGGATGCTGTGAAAATC CAAGCTAGAGGAAAGCACTCTAAACATAAGTAATTGATGTGTTAAAATGCCACTCC [C, T] ATTCCCTGAGGGTTCTAAACTAAGAACATTGAGAATGATGATTATTGATGAGGTTAACTAT |

FIGURE 3, page 116 of 122

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| | CTCTTCCAATCGATAGTTGGTCATATCCACTCTATTATTTACAAAAGTAAGGGTGAA AATATATATGTTACATATATGTATAATGTATAATATGTTGCATATGAAAATTCTTAGA ATAGCATTCAAATCCTGGAAATAACATTCGAATTCTACCAAGAACCTATGTGCCCGGGCC TCTGCCGATTTCTCACCCCTAACCCCTTGATACTTCCTCATCTCCACTCCAGTCATT [A, G] |
| 198458 | CTAAACTAAGAACTGAGAATGATGATTATTGATGAGGTTAACTATCTCTTCAATCGA TAGTTGGTCATATCCACTCTATTATTTACAAAAGTAAGGGTGAAAATATATATGTTA CATATATGTATAATGTATAATATGTTGCATATGAAAATTCTAGAATAGCATTCAAATC CTTGGAAATAACATTGCAATTCTACCAAGAACCTATGTGCCCGGGCTCGCGATTTCTT CACCCCTAACCCCTTGATACTTCCTCATCTCCACTCCAGTCATTCTGTTGTCTTCA [C, T] CTCCCTGAATACACCATGTTCTTCATCATTGAGCCTCATACATGTTCTCTGCC GGGACTTCCCTCCCCCATCTCCCTCTGCCATGCCAACCTCCCTCAGCCTTCCACAC TCAAAGTAATGTCATTCGGCAGAAGCTCTGCCCTTCTTATTATGCTTCATGG AAGCCTCTACTCTCTGCTCATGCCCTCATCACATTGCTAATTCCATTGGTGGCGTAG CATATAATGACTGGGAGGCATTGTCAGCATGCCAGTGGTAGGGTCCATGGATCAG |
| 199076 | CCTCAACACTGAATCCTGGCTTACCAACTACTAGTCTGGGGTCCGGATAATTTATTG AGCTCTTGTCTTAATTCTCTTACTAGTAAGTGGGGATCACCTAACCATGCCAAC TCATAGGGTATTGAGAGGATAATGATCTAAGAGTGTGAGAAGTTCTAAGTACTGGA ACTGCCCATGAAAGTGGCTTAATCTCAGACTTAATGCTCTATGCCGTGCT GTCAGATAACCTGCCACTAGCGTATGTTAGGTGAATTAAATAATTCC [C, A] ATTTAAAAATCAGTCTTCAGTTGCACTATCTACATGTCAGTGCTCAGTAGCCACATGT GGCTAGTGGCTACCACATCAGGCAGCACAGATGTAGAACATTACATCAGCAGAAAGT TCTACTTAAAGTCTCTTGTCACTCTCGCTCACCTCCCTAAACCTGCTTCTC TGCTCTTATGTCAGAACCGCATTCTCACAGCCAATTCTCATTCATTCAAA GCTATGTCAGTTGCTATTGCTGTCACAATTACACAAACAGTGA CTAAACAA [A, G] |
| 199527 | CGTCCCTCACCTCCCTAAACCTGTCCTCTGCTCTTGTCTAGAACCGCATCTTAC CTCACAGCCAATCTTATCTCATTCATTAAAGGCTATGTCAGTGCTATTGCTGCTGTACA AATTACCAACACAGTGA CTTAAACACAGATTATCATCTCACAAATTCTGTAGGTC AGAAGTCTGACTTGAGTTCACTGGACTAAATCAAAGTGTGGCAAGGT CATGTTCTT CCTGGAGGCTCCAGAGTTAAGTTGTTCTTGCCTTCCAGTTCTAAAGGCCACCT [A, G] TATTCTTGGCTCCATGTTACCAAGCTTCTCCATATTCAAACCCAGCAATGTTACCTC TCTGACCCCTCTCTATCATCACATCTCGCTAACACAGCCTCCAGAGGCCATC TCCCATCTCTGACTGGGAGATCTCTCCCTCAGGAATCAGCTACAGTAACCTGCC TTACAGCAGGTACCAAATAAGGCACCCATTGGCTATGAATGTTAGCC ACTGGGAACGT ATCCACTTCTCAGCAAACATTGGCATGTTGATTGACACAGACACTTTCTGGGCTC |
| 199584 | TACCTCACAGCCAATCTTATCTCATTCAATTAAAGGCTATGTCAGTTGCTATTGCTG TGTACAAATTACCAACACAGTGA CTTAAACACAGATTATCATCTCACAAATTCTGTAG GTCAGAAGTCTGACTTGAGTTCACTGGACTAAATCAAAGTGTGGCAAGGT CATGTT CTTCTGGAGGCTCCAGAGTTAAGTTGTTCTTGCCTTCCAGTTCTAAAGCCA CCTATATTCTTGGCTCCATGTCACCAAGCTTCTCATATTCAAACACAGCA ATGTT [C, G] CTCTCTGACCCCTCTTCTATCATCACATCTCGCTAACACAGCCTCCAGAGGCC ATCTCCCCTCTGACTGGGAGATCTCTCTTCAGGAATCAGCTACAGTAACCTGCC GACTTACAGCAGGTACCAAATAAGGCACCCATTGGCTATGAATGTTAGCC ACTGGGA CGTATCCACTTCTCAGCAAACATTGGCATGTTGATTGACACAGACACTTTCTGG CTCAAAAACCTTGAGAATGACATTATCCAGAAATAGTCAAGTCTGAGTT CATTTG |
| 200070 | CCACTCTTCAGCAAACATTGGCATGTTGATTGACACAGACACTTTCTGGGCTCA AAACCCCTTGAGAATGACATTTCATCCAGAAATAGTCAAGTCTGAGTT CATTTGTTGTC CCATGGCTTCTGATTGGAGAAGACATTGCTAGGTCACTTAGCTTATA ACTTCAATTCCACATCTGCAAAACGGGCACAGATCATGTC CTGCAATTAGCCTGATCA CTGTCAGTGAATGTTACTGTTAGTGGTATTAGCTATAGTAA ATGTTGAAGAG [T, G] TAGCACACGGCTGAAATCTGAAAACACTGAGGTGGCTTATTCTCAAAGCATT TAGCAGCTACTGTTAAGAGTACTGCTCTGGAGGGACACCAAATATGTGAC CATCTCC CAAGGCCATCTCCCTTCAGATTCTTTGGAGAGACAGAGCCTGCTCTGT CGCTCAGACTGGAGTCAATGGCATGGCTCGGCTACTGCAACCTCCAC CTCCGGATT CAAGTGA TTCTCTGCCACTGCCAGTGGTGGGATT ATAGGTGCCCATACCACAA |
| 200429 | TTTAGCAGCTACTGTTAAGAGTACTGCTCTGGAGGGACACCAAATATGTGAC CATCTCC CCCAAGGCCATCTCCCTTCAGATTCTTTGGAGAGACAGAGCCTGCTCT GTCGCTCAGACTGGAGTCAATGGCATGGCTCGGCTACTGCAACCTCCAC CTCCGG TTCAAGTGATTCTCTGCCACTGCCCTCCGGAGTGGTTGGGATT ATAGGTGCCCATACCA CACCTGGCTAATTGGTATTGGTAGACACGGGTTCTCACGAC GTGGCCAGACT [A, G] |

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|--------|---|
| | GTCTCAAACTCCTGACCGTGTATCCATTACACCTCCGCCCTCCAAAGTGCTGAGATTACA GGTATGAGCCACCACCCCCCAGGCCTTTCTTCTTCCTTCTTTGAGGCAGGGT CTCGCTCTCTGCCAGGCTGGAGTGCAGTGGTACTATCATAGCTCACTATAACCTCAA CTCCTGGGCTCAAGTGATCCACCCACCTCGGCCCTCCAAAGTGCTGGGATTACAAGCATG AGCCACTGTCCCCAGCCCCTTCTTCAGATTCTGAGAACTGCTGGTATCACCTCCTGCC |
| 200676 | CTAATTGGTATTTGGTAGACACGGGTTCTCACAGACGGTTGGCCAGACTAGTCTCA AACTCTGACCGTGTGATCCATTACACCTCCGCCCTCCAAAGTGCTGAGATTACAGGTATG AGCCACCACCCCCCAGGCCTTTCTTCCTTCTTTGAGGCAGGGTCTCGCT CTCTGCCAGGCTGGAGTGCAGTGGTACTATCATAGCTCACTATAACCTCAAACCTCG GGCTCAAGTGATCCACCCACCTCGGCCCTCCAAAGTGCTGGGATTACAAGCATGAGCCAC [A, G, T] CTCCCCAGCCCCCTTCTTCAGATTCTGAGAACTGCTGGTATCACCTCCTGCCCTGACAA TGAAAACATAGATGCAGCATTGGTGTAGGGCCAAGCAGGCAAGCCTATTGCTCCTAG ATAGAAAATTGGTGTGACCATAGACCTGGGCTTCTCAGAACCTCTCAGAACATGGCTTTG CTCTCAGGAAAAAAAAGAATATTGCTATTCTGGATAGAACAAATTGGCATTCTACAT GTATATGAGTAGTTATGTGTTGCCATAATTAAATATGGATGTCGAUTGTTCCCCA |
| 202325 | GGAAAAGTAGCTCTGGCACGTAGCGGACATTCAAGCCACATTGTTACTTGTGTTGAC TTTTAAACTCCTCTATAGGCCACAGGGATTATCAGCATTGCAATTGGGGAGTC AGGCTGTGTAAGCCTGTGAAATGATAATCAGCAAAGAGAATAACAGAGTACCTTAA ATCATGAGCAAATGGTGTGCTTAGTTCAAGATCCCAGGGCTGTTTAAACTTAC TTCCAATGGCCAATCCTTCTAGAACATGTGGCTTAAACGCTTGTGTTATGGGGAT [T, C] TGCCTTCAGAAAATCAATTCTCACATCTGGCTTCAGGCTTTACTCAATCAGCCT CCTAACAAAGTAATTTCAGTTCAAGGGTGCACCTAGTGTACTGGTTCACTGAGC ATTACATGGCCTAACCTGATTTGTTAGTAAAGGAGCTGTTCTCAGATTGGAG CCTCAGAGAAAATCTCTGATCTCAGGCTATTCTGTTCAACCATGTGCCAATATAC CCTCTAGGTACCTGGATACAATTGACATCCCAGTAAATGTGGGTGTTCAAGCATCCA |
| 202550 | GTTTTAAACTTACCTCCATGGCAAATCCTTCTAGAACATGTGGCTTAAACGTCCT TTGTTATGGGGATTGCTTCAGAAAATCAATTCTCACATCTGTGGCTTCAGGCT TTTACTCAATCAGCCTCTAACAAAGTAATTTCAGTTCAAGGGTGCACCTAGTGT ACTGGTTCACTGAGCATTACATGGCCTAACCTGATTTGTTAGTAAAGGAGCTGTT TCTCAGATTGGAGCCTCAGAGAAAATCTCTGATCTCAGGCTTAACTGGTAC [C, T] CATGGCCAATATACCCCTAGGTACCTGGATACAATTGACATCCCAGTAAATGTGG TGTTCTAAGCATCCATTCTCATAAAGTTAGGGCTTCAGATACCAGGATGGTACTTG CTCTACTAAATGGGATCCTAGGAAATCCCCTCAAGGATACCACCTCAGTGGGTA CTGATTAGGGTCTCTCTGAATAAAATCTGTCAAATCTGGTAGAACATCAAATT CTGATAAATGGCTGCCAATGGAGAAGTTAGGGAAAATTATCTTACATTTCATCGAA |
| 202609 | TTTGGTTATGGGGATTGCTTCAGAAAATCAATTCTCACATCTGTGGCTTCAGGCT TTTACTCAATCAGCCTCTAACAAAGTAATTTCAGTTCAAGGGTGCACCTAGTGT TACTGGTTCACTGAGCATTACATGGCCTAACCTGATTTGTTAGTAAAGGAGCTGTT TTCTCCAGATTGGAGCCTCAGAGAAAATCTCTGATCTCAGGCTTAACTGGTCT CCCATGTCGAATATACCTCTAGGTACCTGGATACAATTGACATCCCAGTAAATGTG [G, C] GTGTTCTAAGCATCCATTCTCATAAAGTTAGGGCTTCAGATACCAGGATGGTACTT GCTCTACTAAATGGGATCCTAGGAAATCCCCTCAAGGATACCACCTCAGTGGG ACTGATTAGGGTCTCTCTGAATAAAATCTGTCAAATCTGGTAGAACATCAAATT CTGATAAATGGCTGCCAATGGAGAAGTTAGGGAAAATTATCTTACATTTCATCGA AGAAGTGGTATTGTTGATTTAACCGTCTTCCATCACCATTGTTCTATAGCAATT |
| 202714 | AGGGTGACCTAGTTGACTGGTTCACTGAGCATTACATGGCCTTACCTGATTGTTGATA GTAAGGAGCTTTCTTCAGATTGGAGCCTCAGAGAAAATCTCTGATCTCAGG CCTATTCTGTCACCCATGTCGAATATACCCCTAGGTACCTGGATACAATTGACA TCCCAGTAAATGGGGTGTCTAAGCATCCATTCTCATAAAGTTAGGGCTTCAGAT ACCAGGATGGGTACTGCTCTACTAAATGGGATCCTAGGAAATCCCCTCAAGGATAC [C, T] ACTTCACTATGGGGTACTGATTAGGGCTCTCTCTGAATAAAATCTGTCAAATCT GGTAGAAATCACAAATTCTGATAATGGCTGCCAATGGAGAAGTTAGGGAAAATTATCT TACATTTCTCATGAAAGAATGGTATTGTTAACCGTCTTCCATCACCATTG TCCTATAGCAATTAGGGTGGAGGAATCTACTTCTCATTTCAATTGAG TGGCCCTGCCCTGCCCAAGTTATTACCCACTTCTGACCCGTGATAACTAGAATG |
| 202809 | CAGAGAAAATCTCCTGATCTCAGGCCATTCTCTGTCACCCATGTGCCAATATACCC CTAGGTACCTGGATACAATTGACATCCACTGAAATGTGGTGTCTAAGCATCCATT ATCATAAAAGTTAGGGCTTCAGATACCAGGATGGTACTTGCTCTACTAAATGGGATC CTTAGGAAATCCCCTCAAGGATACCACCTCAGTGGGACTGATTAGGGTCTCT CTGAATAAAATATCTGTCAAATCTGGTAGAACATCAAATTCTGATAAAATGGCTGCCA |

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| | | [A, G] TGGAGAAGTTAGGGAAAATTATCTTACATTTCATCGAAGAACTGGTATTGTTGATT AACCGTCTTCCCACCAATTGTCCTATAGCAATTAGACTGGGTGGAGGAATCT ACTTCTCATTCAATTGAGTTGACTGGCCCTGCCCTGCCCAAGTTTATTATCCCCACT TCTGACCCTGTGTATAACTAGAAAGACTGGGCAGGAAACAAGACTAAAGGGACAC AAAGTCCCTGCTGATATCAAAGTAATCTCTAAAGTCCAAAGAATTAGCTTGCCAT |
| 203159 | | ATTGTTGATTAAACCGTCTTCCCACCAATTGTCCTATAGCAATTAGACTGGG TGGAGGAATCTACTTCATTCATTCAATTGAGTTGACTGGCCCTGCCCTGCCCAAGTTA TTATCCCCACTCTGACCCTGTGTATAACTAGAAAGACTGGGCAGGAAACAAGAC TAAAGGGACACAAAGTCCCTGTGTATAACTCAAAGTAATCTCTAAAGTCCAAAGAATT TAGCTGCCATTCCATATGCTTTGAGTTGCTTAAATCCTGTTACCCAATT [G, C] ACCATACTGAATCATGTTATAGCATCAGATATAGACATAGCATCTCAGATATAGCCTAAA CCTCACACCTCTCCATTCTACTGCTGAGCCCAGAGCCAGGCCATCTCCACACAC CACACAGTAGCCTCTTACCACTCAGGCTCTGCTATGTTTGCCTCTACAGGCT ACTTTCCACACAAAGACGAGGACAATAATTCTAAATATATCAGGTTATATGGCTCC TTTCTTAAACTTTACCACTTCCCTGTTGCCAGTAAATACACATGGCCCTCAGAG |
| 203168 | | TTAACCGTCTTCCCACCAATTGTCCTATAGCAATTAGACTGGGTGGAGGAAT CTACTCTCATTCATTCAATTGAGTTGACTGGCCCTGCCCTGCCCAAGTTTATTATCCCCA CTTCTGACCCTGTGTATAACTAGAAAGACTGGGCAGGAAACAAGACTAAAGGGAC ACAAAGTCTGCTGTATACTCAAAGTAATCTCTAAAGTCCAAAGAATTATAGCTTGCC ATTCCATATGCTTTGAGTTGCTTAAATCCTGTTACCCAATTGACCATACT [G, A] AATCATGTTATAGCATCAGATATAGACATAGCATCTCAGATATAGCCTAAACCTCACAC CTCTCTCCATTCTACTGCTGAGCCCAGAGCCAGGCCATCTCCACACACCACAGTA GCCTCTTACCACTCAGGCTCAGGACTCTGCTATGTTTGCCTCTACAGGCTACTTTCCA CACAAAGACGAGGACAATAATTCTAAATATATCAGGTTATATGGCTCTTCTTAA AACTTTACCACTTCCCTGTTGCCAGTAAATACACATGGCCCTCAGAGCCCTCAATG |
| 203704 | | CTTAAACACTTACCACTTCCCTGTCAGTAAATACACATGGCCCTCAGAGCCCT CAATGCTGCTTCCCTGTGGCATCAGCTCTCACTCCTTTCTAGCTCATTCTCTGCA GTTACACTGGCATCTTGCACTTCTGAGCACAGCCTCGCACTTCTCAAGTCACTTG ATATGCTATTCTTACCTGGCATTTCTACTAGAGTTCTAGTGTGCTGTGCTCC TTGTCATTCAAGGCTCAGTCAAGTGAAGCCACCTTGGAAACGACATCCTGACCAAGCA [C, T] TTTTAAAGTCACTCCCACTCACCCAGCTCACAGTCACAATTCCCTTTTATTGTACTTT TCATGGTCTTATTCTCTGATATATTTTATTGGTGTGATCTAGATTGAGGTTGG CAAACCTCTGCCTACTGCCAATTATCCACCTATTGTACAGCCATGAGCT AATGTTACATGTCATTAAATGGTTGATAAAATCAAAGAACGACATTGTGAC ATGTGAAATTATGAGAGATAAAATTCACTGCCCATAAGTTCTGGAACATAGCT |
| 204111 | | TAGATTGAGGTTGCCAAACTCTGCCTACTGCCAAATTCACTCCACACCTATTGT ACAGCCCACATGAGCTATGGTACATGTACATTAAATGGTGTAAATAATCAAAGAA GACCAATTGTGACATGTGAAAATTATGAGAGATAAAATTCACTGCCATAAAGTTT TCTGGAACATAGCTATGCTCATTGTTATATATTCTATATCTGCTCTGCATGACAA CACAGAGATAAGTGTGGCAACACAGACTATGATCCACAAAGCCAAGATATCTACC [G, A] TCTGCCCTTAGGATAAAAGCTGTCAACCCCTGGTCTGGATATGTATTCTTCTACT TCTCTACCTCTAAATGTTCTAAACACCAACTTAAAGCAAGGACCATATTGTAT TTTTATTATATTCACTGCTAGAATATACTGAAACAGACTAAGCACACATATAAAA GGTTTTATTACATCACTGGGAAGTTATCAAATGTTCTGTGCAATCAGAGAGCACAC TATGCTAGCCCATTTCAAAAGATCTGCCATAAGTAAGGAAAAAAATGCCCTGCAAAT |
| 204132 | | CTGCCCTACTGCCAAATTCACTCCACACCTATTGTACAGCCCATGAGCTATGGTT ACATGTACATTAAATGGTGTAAATAATCAAAGAACGACATTGTGACATGTGAA AATTATGAGAGATAAAATTCACTGCCCATAAGTTCTGGAAACATAGCTATGCTCA TTTGTATTATATTCTATATCTGCTCTGCATGACAACACAGAGATAACTAGTGGCA ACACAGACTATGATCCACAAAGCCAAGATATCTACCGTCTGCCCTTCTGGATAAAG [C, T] TTGTCACCCCTGGTCTGGATATGTATTCTCATACTTCTACCTCTAAATGGTCT AAAACACCAACTCTTAAAGCAAGGACCATATTGTATTATTATTCACAGTGGC TAGAATATACTGAAACAGAGTAACACATACATATAAAAGGGTTATTACATCACTGG GAAGTTTATCAAATTTCTGTGCAATCAGAGAGCACACTATGCTAGCCATATTCAA AGATCTGCCATAAGTAAGGAAAAAAATGCCCTGCAAATTAAATAACACCTCAAG |
| 204285 | | AGTTTTCTGGAACATAGCTATGCTCATTGTTATATATTCTATATCTGCTCTGCA TGACAAACACAGAGATAAGTGTGGCAACACAGACTATGATCCACAAAGCCAAGATA TCTACCGTCTGCCCTTAGGATAAAAGCTGTCAACCCCTGGTCTGGATATGTATTCT TCATACCTCTACCTCTAAATGTTCTAAACACCAACTCTTAAAGCAAGGACCAT |

FIGURE 3, page 119 of 122

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| | | TTTGTATTTATTATTCACAGTGCCTAGAATATACTGAAACAGAGTAAGCACATACA [T, A] ATAAAAGGGTTATTACATCACTGGGAAGTTATCAAATGTTCTGTGCAATCAGAGA GCACACTATGCTAGCCCATATTCAAAAGATCTGCCAATAAGTAAGGGAAAAAAATGCC GAAATTAATAAAATAACACCTCAAGCAGAACCTCAGATAAAGTTACACATAAACTTATT AACTTCAAACTTTAAGTGTGTTAATTAGATAATCCTAGGTGCTGTAACAGATAAACT CTGAAATCTCAGCTGTTAATGCAAAAGAAGCTTTTTGTCACTCAGTGACCAC [T, G] CTGCCCTCTGCATGACAACAAACAGAGATAAGTAGTGGCAACACAGACTATATGATCCACAA ACCCAAAGATATCTACCGTCTGCCCTTCTAGGATAAAAGCTTGTCAACCCCTGGCTGGAT ATGTATTTCTTCATACCTCTCACCTCCTAAATGTTCTAAACACCAACTCTTAAAG CAAGGACCATATTGTATTTATTATTCACAGTGCCTAGAATATACTGAAACAGAGT AAGCACATACATATAAAAGGTGTTATTACATCACTGGGAAGTTATCAAATGTTCTG [T, G] GCAATCAGAGAGCACACTATGCTAGCCCATATTCAAAAGATCTGCCAATAAGTAAGGG AAAAAAATGCCCTGCAATTAAATAAAATAACACCTCAAGCAGAACCTCAGATAAAGTTACAC ATAAAACTTATTAACCTCAAATCTTAAAGTGTGTTAATTAGATAATCCTAGGTGCTGTA ACAGATAAAACTCTGAAATCTCAGCTGTTAATGCAAAAGAAGCTTTTTGTCACTCA GTGACCACTTTGGCTGAGGGTCTGGCTAAGACTCAGGCTCATGGACCCCTCCACTGT |
| 204334 | | GGGCATCAGCTAGAAGAGATGCCACATCACTCTGTTGTTCCGTTGGCCAGAACCCAG TTACTTGGCTCAATCAGAGGTAAAACAAGCTGGAAATGTCATTGCTGGCCAGGTAGCCA CTCTCCACCAACATCTCACACCATGGAAGGAAAATAAGAATGCTTGGGAGTCAGCTAA TATCTGGCCACAATAGACAATTAGTCCTTAAAGTGTGTTAATTAGATAATCCTAGGTGCTGTA TGAGGTAAAGGGCTGTGGTCTCAGAGGCAGCTGGAGATACCAATTCTGAAATTGATT [G, T] ATGACTGTGCAATATAGATCAATTGAAATTTCAGTTCTATGATCATCTCCTTTAAAGACT TTCTCCACTAAAAAAATCTGATCTGTCATCTAGATTCTACATTCAAAGAATCTT TAGAGGTAGATGGGAAACACGGAGATCAAAATTATAACTGGCCCCAGGGAGAACCTCT CACTGTCAGAAATTGTTAAATCTCTCCTGACTGGTAGGCCAATCTTACCAACTACT AACTGATTTACTTTAGAAAGAATCAAATTCTGCATATCCTCAGTAGAGAATCAA [C, A] GGAGATCAAAATTATAACTGGCCCCAGGAGAACCTCTCACTGTCAGAAATTGTTAAA TCCTCTCTGACTGGTAGGCCAATCTTACCAACTACTAACTCTGATTACTTTAGA AAGAATCAAAATTCTCTGCATATCCTCAGTAGAGAACATCAAAGTGTGTTAATCCAAAC CAATTCCAAAGAAGGAAAATTGCTCTAATCTCAAAGTGAATGTGTTCAAAAT CTTGCCAGTTCTTACAAACTGTGGAACCAGATTCTCAGTACTAGTTACA |
| 205015 | | ACCATGGAAGGAAAATAAGAATGCTGGGAGTCAGCTAATTATCTGGCCACAATAGACA ACTTAACTTAAATTGATACTAAAGGATCTTATTTTGTAGGTAAAGGGCTGTGGTC TCAGAGGCAGCTGGAGATACCAATTCTGAAATTGATTTGACTGTGCAATATAGAT CAATTGAAATTTCAGTTCTATGATCATCTCCTTTAAAGACTTCTCCACTAAAAAATCT GATCTGTCATCTAGATTCTACATTCAAAGAATCTTAGAGGTAGATGGAAAACA [C, A] GGAGATCAAAATTATAACTGGCCCCAGGAGAACCTCTCACTGTCAGAAATTGTTAAA TCCTCTCTGACTGGTAGGCCAATCTTACCAACTACTAACTCTGATTACTTTAGA AAGAATCAAAATTCTCTGCATATCCTCAGTAGAGAACATCAAAGTGTGTTAATCCAAAC CAATTCCAAAGAAGGAAAATTGCTCTAATCTCAAAGTGAATGTGTTCAAAAT CTTGCCAGTTCTTACAAACTGTGGAACCAGATTCTCAGTACTAGTTACA |
| 205155 | | TTTAAATCCTCTCCTGACTGGTAGGCCAATCTTACCAACTACTAACTCTGATTACT TTTAGAAAGAATCAAATTCTGTCATATCCTCAGTAGAGAACATCAAAGTGTGTTAATCAA TCCAACCATTCCCAGGAAAAGGAAAATTGCTCTAATCTCAAAGTGCATGTGTC AAAAATCTTGGCAGCTTCTTACATTCAAACCTGTTGAAACCAGATTCTCAGTCACTAG TTTACATGAGGCATAGGCATAGGGCTGAGTACATCAGGCCACTGACCCCTGGCAATT [T, A] TGTTTATCTCCCTACAAAAGAGTTAGAAATAAAATAGGTTGTTACAATTCTAACTA TTCTACTAGCTTGTATGAAAGTACCTAGCATATAAGCCAAGCTATAACCACATT TAGAGATCCCAATTAAACAATAGTGTAAATTAAAGTGTGCTAGCTTGAAGGACA ACTATCCTAAAATTAAAGGTGCTTCTAAGCCATATACATCTGGCTACACAGATTCA CTCTGCTTTTTCTTACATTGTTAGAAACCTGGGATTACGGCAGTTTATAATT [G, A] TTCATCAAACGTGGAACCAAGATTCTCAGTCACTAGTTACATGAGGCATAGGCATGA GGCTGAGTATCACTCAGCCACTGACCTGGCAATTGGTTTATCTCCCTACAAAAG AGTTAGAAATAAAATAGGTTGTTACAATTCTAACTATTCTACTAGCTTGTATGTA AAGTACCTAGCATATAAGCCAAGCTATAACCACATTGGTTAGAGATCCCAATTAAACAT AGTGCCTAAAATTAAAGTGTGCTAGCTTGAAGGACAACATCTTAAATTAAAGGT [G, A] TCTTCTAAGCCATATACATCTGGCTTACACAGATTCTGCTTTTTCTTCTATCTT GTATGAAAACCTGGGATTTCAGGGCTGTTATAATTAAACCCACATACCTGAAACA TTCTATACATAAGAAGGTTATATTGTCAGTGAATTCTCAAATGCTCTATAATGCATG CTTCTTGGCAGATAATGTCAGACAGCAAATTGAAAACAGAAAATGCTTGTAGTATAGAA ACCTGTTAACCTCAACTAGGCACATACCCATTGAAATATCATTCTAGCTTACTGACAA |
| 205510 | | TACATCTGGCTTACACAGATTCTCAGTCACTAGTTACATGAGGCATAGGCATGA GATTTCAGGCAGTTTATAATTAAACCCACATACCTGAAACATTCTATACATAAAGA AGGGTTATATTGTCAGTGAATTCTCAAATGCTCTATAATGCACTGCTTCTTGCAGATA |
| 205712 | | FIGURE 3, page 120 of 122 |
| 206028 | | |

ATGTTAACAGCAAATTGAAAACAGAAATGCTTGTAGTATAGAAACCTGTTAACCTCA
 ACTAGGCACTACCCATAATGAATATCATTTCAGCTACTGACAATATGAACCATAACT
 [G, A]
 TGCTAATTGTTTACATGCATTAACATAATGTTAGTCTCATAGCAGCCATGAGGCAGGTA
 CCATTGTTACATCCACTCTACAGATCAGGGACTGAGGACCAAGAGGTCACTTGC
 TCAAGCTGATAGTGGATTAGGAAAGCCTAGCTTTAAACCAGGCTGGCCTGAGGCC
 AGAGACCAAGATCTGACCACTGGCTCCCTCTTTAAATAATACATCTTAATACTC
 AGTGGCTTAGAGGAATTGGTGCATGCAAAGAACCTTACTGATGTT
 206073 GTATGAAAACCTGGGATTTACGGCAGTTTATAATTAAACCACATAACCCCTGAACA
 TTCTATACATAAAGAAGGGTTATATTGTCAGTGAATTCAAATGCTCTATAATGCATG
 CTTCTTGACAGATAATGTCACAGCAAATGAAAACAGAAATGTTGTAGTATAGAA
 ACCTGTTAACCTCAACTAGGCACACTCCATAATGAATATCATTAGCTACTGACAA
 TATGAACCATACACTGTGCTAATTGTTACATGCATTAACATAATGTTAGTCTCATAGCA
 [G, C]
 CCCATGAGGCAGGTACCTGTCACATCCACTCTACAGATCAGGGACTGAGGACACAGA
 GGTCAAGGTAACCTGCTCAAGCTGATAGTGGTATTAGGAAAGCCTAGCTTTAAACAG
 GTCTGCCCTGAGGCCAGAGACCAAGATCTTGACCACTGGCTCCCTCTTTAAATAA
 TACATCTTAATACTCAGTGGTTAGAGGAATTGGTGCATGCAAAGAACACTTC
 CTTCTACTGATGGTGTGCAGTTGAGTAGGAATTAAACCTGTCAGTGA
 206487 AAACCAGGTCTGGCTGAGGCCAGAGACCAAGATCTGACCACTGGCTCCCTCTTTTT
 AAAATAATACATCTTAATACTCAGTGGCTTTAGAGGAATTGGTGCATGCAAAGGAAG
 CAACTCCTTCTACTGATGGTGTGCAGTTGAGTAGGAATTAAACCTGTCAGT
 ATTGTAAGAAGGAAGAAGAAAGACAGGAAGGAAGGAGGAAGAATAGGAGGAAGGAAGG
 GAGAAAGGATGGATGACAGGGAAAGAAATGAACAAGAAGGAGGAAGGAAAAGAAAA
 [-, A]
 AAAACCTTAGGACCATCTATGAGGGGATAAAATCATATTGACAGATATTCCCAGGTT
 GTATTGATTTTATTAAATAATCTACCTTGTGAGGTCACAGACCTGGTTCTATGTTCT
 GCCACTAATCTACTATATAACCTATTGTTCTAGATATTAACTCCTAACGCT
 GTTTCTATCTGAAAGCAGAGAAAATACCTAACGCTGCGCTGCACTATCTGCATAGT
 GTAAAGATGTTAAAAGTACTGAGGATTAAAAAACAAACAGTCTTAGGTTCCCTAGAAC
 207036 GTTATAAAAAGTACTGAGGATTAAAAAACAAACATACCAAAAGGAGAAAACCTTACA
 TCATAATATACTACCAAGACTGCTTTAAACATCTATTTCAGCTAGAACGGCTCTTGAG
 AAAGGCAACTCTGGGGGAATCCAATAGGTGAAATAGATAAAAAGCAGAGCTGACCAT
 TAGACCAAGGATGAGGAAGCCAGAGCTCTCCCTACTGCCCTCACACCTCCAT
 GAGCGGTGAAAGGCCCAACAGTCTTAGGTTCCCTAGAACACAGTCCTGCAAAGC
 [G, A]
 AGGGAACTGAGACCAACTGCTTGAGCAAATTCTGTTCTGCGCTCTGCTTCTCC
 CTGTAAGGAAAGGAAAGTGGCACAATGATCTCTGCTAGTCCCCTCCAGTTGACATT
 CTAGAACCTGAGGTTCTGGTTCTGTCTAGAAAGCAATGTCCTCCACCTTGA
 CTAACAGCATCCCTCACAGGAACATGGTACACATGCGACTGAGGTAAGCCTCCAT
 CGAGTATCCTGAGAGACATGCTCCCGTCAGACCTCCGAGCTGTCAGCATCGATAGG
 209309 TTCAATTATTTCTGAAAGACCTGGAAAATGAATTAGTATAAAATAACCTACTCAA
 TTGAAAAAATTAAATTGTCACCCATAATTAGGCACTCCCTATATTCATATTGTA
 ATAGTTTATACTGGAGACAGAAAGAAAATTAAATAAGGATAAACACCATCATAG
 GAAGTAAATCTAGATGAAAATACAGTTAACCTAAAATAAGTAAAAGAATGTAATG
 TTTAAATCATATGATTCAACTATAGTCAGAATGAGTTCACTGAAGTGCAGGGTTAGTA
 [G, C]
 ACATGGGGAAAGAGGGTTGACCCCTGTGAACAACACTGCAGGGAAATTAAACCTGGTC
 CTGGCTGCATTGTACAAACAGACTGGCTGTAAACAGTTAACCTTATCCCTCAGA
 GGTGCAATTCCAACCTGAACCAATTATTGTTGGGATTCCCTGGAGCAAATTGGG
 GGCACCTGAAAGCACTGTGCTCTTATTCTGTTACCAATTAGGCTCGGT
 ATGTCCAATTCTCATGAGCTCTTACTGCGCTGCTCTGGTATTGACTGGTGACCCAG
 210867 GAGCTGGCGCAGAGATTGCCAACGACGTGGCTACTCCCTACCGTCTGGAGATTGTCAGT
 GATGGAAAATACGGAGCCGAGACCCCTGACACGAAGGCCTGGAAATGGCATGGTGGAG
 CTGGCTATGGAGTAAGTCACTGCAGGGTGGGAAATTAGAGGGCGGAGGGAG
 GACAGGAAATCATGGTGGTGGCTGCCCTGCCACAGATGTCATGAAACCTGTAA
 TTGAGTGGTGTGCTGTCAGACAGATGAGTCATCCAAAATCCAATTCTCAGACACTCT
 [T, G]
 TGTTCAAGGTTACTGGTCCCAGGTCCTCAATCCACTCAGAGTCTTGTGACGTCAGTTGA
 TTGTCGTCAACACAGGTGACACCATAGCTCAAGATCAATTCTTGAGGGCAGACTGCT
 GAGTTGCTATACAAAGTCACTTGTGGCTCTCAGTATCAGTTCTCTGATATTAA
 ATGCATCTGGAGCCAACCTAACATTCTAGTTACTGCGCTCTAGTTCATGCTCTC
 TGAAATTCCAATTCAAGTCAAATGCCCTTAATTACTCTGTCAGAGTGCCTCC
 212386 GAAATAAGTAAGGTGTGAGAGGAGAATGAGAAAACGCATGGTTTGTGAGGACTTGGG
 TTGAAGAGTAGTCAGGGATACTATGAGTAAAAATAGCAAGAGGAAGAGTGTGGATGAT

TCAGTGGGCATTGGGAGATCACGAAGGTATTTGAGTAGAGAGACAACAAAAGGCAATGGA
AGAAGCCTCCAGCTGCCTGTGCAGGGAAAGGGACCACACGGCTTCACTCATAGAAACTA
AACACATGCCAAGCCCCAGGTCAATGTTAAGTGCTCATAGGACAAGCAGCCACTGAGG
[A,G]
AGATGATAAATCTTGTTCATATCAGGGCAAGAGGGACCATGATGGCCCTGAGAGACATA
CAAAGGGAAATTCAAAGAAGAAAAGATGGAATAAGGAAATCTTCCTCAGGGAGGTTAGCT
TTTGAGATGACATGTGAAGGTGGTTATTGAGTTGGGAATGGGATGTGCTCTCTCCTT
CTTATCCCTTACCCACCTCTCACTTGGGAAGCTCCATGGACAAAAGGTAGAGACCTGG
ATAGTACATGCTGCATCTGGAGGCTGGTTCCATGGAACTCCCATCAAGCTCTTAAGGT

Chromosome mapping:

Chromosome #: 5

FIGURE 3, page 122 of 122